

MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office

VOL. LXV. No. 4.
WEEKLY.

BALTIMORE, JANUARY 29, 1914.

\$4.00 A YEAR.
{ SINGLE COPIES, 15 CENTS.

PUBLISHED EVERY THURSDAY BY THE

MANUFACTURERS RECORD PUBLISHING CO.

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Subscription \$4 a year (payable in advance) to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. To Foreign Countries (including Canada) in the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as second-class matter.]

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COTTON IN COMMERCE.

IMPORTANCE of cotton of the South in American commerce is demonstrated both when the volume of export values is swelled because of cotton exports and when, because of fewer bales exported or lower prices for the staple, cotton exports show decreased values instead of increased ones. This fact appears in the comparison of export values in the calendar years, 1912 and 1913, of breadstuffs, cottonseed oil, cattle, hogs and sheep, meat and dairy products, raw cotton and mineral oils set forth in the following table:

Breadstuffs,	\$149,814,877	\$191,477,180
Cottonseed oil,	21,674,185	17,816,296
Cattle, hogs, etc.,	3,553,349	895,603
Meat and dairy,	123,244,132	138,924,092
Cotton,	622,778,220	575,087,565
Mineral oils,	121,874,988	147,047,187
	\$1,042,939,751	\$1,071,247,923

The aggregate value of these six classes of exports in 1913 was about 43 per cent. of the value of all merchandise exports from this country in that year. The aggregate value of these six classes of exports in 1913 was \$1,071,247,923, or \$28,308,172 greater than in 1912. There were increases from \$149,814,877 to \$191,477,180, or by \$41,662,303, in breadstuffs; from \$123,244,132 to \$138,924,092, or by \$15,679,960, in meat and dairy products, and from \$121,874,988 to \$147,047,187, or by \$25,172,199, in mineral oils, a total increase of \$82,514,462. Against this increase must be set off the decreases from \$21,674,185 to \$17,816,296, or by \$3,857,889, in cottonseed oil; from \$3,553,349 to \$895,603, or by \$2,657,746, in cattle, hogs and sheep, and from \$622,778,220 to \$575,087,565, or by \$47,690,655, in raw cotton, a total decrease of \$54,206,290. The decrease in cotton was greater than the increase in any of the classes, and was due to a combination of a decrease in a number of bales exported from \$10,687,983 to \$8,602,925 and a decrease in the average export price from 12.8 to 11.17 cents a pound. Nevertheless, the value of raw cotton exports in 1913 was nearly 53 per cent. of the aggregate value of the six classes of merchandise.

THE IMMIGRATION PROBLEM.

THE suggestion as to immigration, credited to Secretary of Labor Wilson, with special reference to Hindus, to the effect that provision be made for the exclusion from this country of aliens unable to pass the physical test required of recruits for the United States army, opens up an interesting

field of discussion. In the absence of publication of the full text of Secretary's Wilson's letter to Speaker Clark on the subject, it is not quite clear whether the proposed new immigration regulation is to apply generally to all incoming aliens or only to Hindus. If applied generally, the provision would bar from entrance to this country many thousands of foreign-born who would be valuable elements in the population of this country. It is quite conceivable that many natives of this country capable of standing the physical test for admission to the United States army might be undesirable citizens, and on the other hand that many foreign-born could become valuable citizens, even though they could not stand the United States army physical test. Furthermore, if the provision should apply to Hindus only, attention would be diverted from the hordes of aliens now pouring into this country through Eastern ports of far lower grade in every respect than Hindus.

In the past ten or fifteen years there has been considerable legislation bearing upon immigration, and much investigation of the subject has been made under Federal auspices. Still, the situation is by no means satisfactory, and the main reason is that, together with the swaying of national lawmakers and administrators of immigration laws by the political influence of compact bodies of voters of alien origin, there has been an inclination to confer upon the Federal authorities power over the distribution of immigrants in this country. At the same time amendments to the immigration laws have been of rather haphazard order in the effort to meet special conditions arising from the radical change in the character of immigration from the classes of foreign-born of forty or fifty years ago, who came to this country because of a desire to become a part of its permanent population, classes animated by individual desire and initiative, to the classes dominating the immigration of the past ten or fifteen years who seek in the United States temporary opportunities to accumulate sufficient money to support them for the rest of their lives in the comparative luxury of the low-grade living in their native land, and who have been speeded to the United States under auspices of foreign governments or of ecclesiastical or philanthropic organizations. Where permanency of residence in this country has been contemplated, the idea has been that of colonization in groups or masses, a bar against relations capable of facilitating assimilation into the great body of American people. Another detrimental influence has been the carelessness of employers of large bodies of labor as to every qualification save that of ability to do certain kinds of work. Such groupings of the newcomers, as well as the massing of millions of them in the larger cities, neither have benefited them, transient as they are in their American residence and not even desiring to become Americans, nor have they been of any advantage to Americans, even if they have not actually been a distinct disadvantage as tending to lower American ideals.

Literary tests and army physical tests are likely to add to the embarrassments of the immigration problem and to work injustice. It ought to be possible to frame legislation on the subject embodying the elements of good in the extreme contentions for or against fewer restrictions or more restrictions upon immigration. Such framing should disregard absolutely arguments advanced by representatives of foreign governments, of trans-Atlantic steamship lines or of hyphenated Americanism, which is usually a self-confession of the corraling of alien instincts for political effect constituting one of the greatest curses of the day. It should eliminate all participation by the Federal Government in the

movement of immigrants after they have met the lawful requirements for admission to this country, a policy open to abuse because of its political possibilities. It should bar from this country immigrants from any land undertaking through its government or any other agency to direct and control the new arrivals, either singly or in groups, or those who are brought to this country by steamship lines subsidized to relieve the congestion of foreign lands at the expense of the United States.

There is room and to spare in this country for thrifty, decent and progressive immigrants, and they will be as welcome here as other millions who in the past have been incorporated with the great American people. There is much work to be done in this country before all of the opportunities for profit and prosperity in developing its great resources have been realized. If that work is not done immediately, the natural resources will not suffer, and if the population is not increased by millions of men and women from abroad, the population will not suffer. It is far better for this country to have a slow development of its resources and to depend upon the natural increase in its population for their exploitation than to wallow in material wealth-gaining at the sacrifice of American ideals through a mistaken notion that the people of this country are called upon to diminish their own vitality in solving the social, economic and ethical problems of foreign lands.

INVESTMENT TIES THAT BIND BALTIMORE AND THE SOUTH.

ILLUSTRATIVE in a striking degree of the advantageous interdependence of Baltimore and the South are the investment relations of the mutual savings banks of the city with the section. The mutual savings bank, that admirable device for the encouragement of thrift, has had its great growth in the country in the six New England States and in New York, New Jersey and Pennsylvania. In those nine States are \$3,339,000,000, or 93 per cent. of the \$3,593,500,000 of savings deposits in the mutual savings banks of the country. Mutual savings of the kind in Maryland constitute \$94,000,000 of the \$95,500,000 of such deposits in the whole South, building and loan associations, loan and trust companies and stock savings banks dominating in that section in the cultivation of the productive savings habit. That is by the way. The interesting and significant fact is in the connection of the mutual savings banks of Baltimore with developmental energies in the South.

Ever since Baltimore has had any financial power it has been a power in finance for the South. The relations have been intimate, friendly and liberal, and were strengthened by the generous attitude of the financial interests of the city in the South's time of sorest need following the wreck of the war. Baltimore knows the Southern people, and has faith in the vast material possibilities of the South. Consequently, Baltimore money has gone freely into the industrial, transportation, financial and general developmental activities of the section, into cotton mills, iron furnaces, lumber plants, fertilizer works, mining, railroad building, steamship lines and public improvements in States, counties and municipalities. A fair minimum estimate of the amount of Baltimore capital invested in the Southern States below the Potomac is \$200,000,000. Only the most detailed kind of a census that is hardly possible could obtain the basis for an authoritative statement of the total, which is usually associated in the public mind with the men of large fortune and the large banking and

trust companies of the city which have led in this beneficial investment in the South.

There is, however, a great army of Baltimore capitalists directly interested in the South whose investments there, aggregating close upon \$70,000,000, average less than \$600 each. This army is composed of the depositors in the mutual savings banks of Baltimore. The extent of their investments is indicated in the figures as of December 31, 1913, of three of the largest institutions of the kind, the Savings Bank of Baltimore, the Entaw Savings Bank and the Central Savings Bank. These three banks had on December 31, \$67,854,920 of deposits, not including undivided surplus chargeable with accrued interest or interest that had been credited for the year, and these deposits, in 121,501 accounts, or an average of \$558 per account, constituted 72 per cent. of all the mutual savings bank deposits in Maryland.

Of \$60,665,457 bonds, book value, in which the funds of these mutual institutions are invested, \$23,167,016, or more than 38 per cent., represent investments in ten Southern States south of the Potomac and Ohio and east of the Mississippi, viz., Virginia, West Virginia, Kentucky, North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee and Mississippi, directly or indirectly. The investments are divided as follows: Railroad bonds, \$16,382,211; municipal bonds, \$5,666,800; street railway bonds, \$369,000; State bonds, \$458,255; county bonds, \$49,500, and miscellaneous, \$111,250. Virginia, North Carolina and South Carolina are represented in the State and county bond investments, and the cities represented in the municipal securities are Atlanta, Ga.; Augusta, Ga.; Charlotte, N. C.; Chattanooga, Tenn.; Columbia, S. C.; Columbus, Ga.; Danville, Va.; Durham, N. C.; Greensboro, N. C.; Henderson, Ky.; Huntington, W. Va.; Jacksonville, Fla.; Knoxville, Tenn.; Lexington, Ky.; Louisville, Ky.; Lynchburg, Va.; Macon, Ga.; Martinsburg, W. Va.; Memphis, Tenn.; Mobile, Ala.; Montgomery, Ala.; Nashville, Tenn.; Newport, Ky.; Norfolk, Va.; Petersburg, Va.; Raleigh, N. C.; Richmond, Va.; Roanoke, Va.; Savannah, Ga.; Wheeling, W. Va.; Wilmington, N. C., and Winston, N. C., and by street railway bonds, Atlanta, Ga.; Augusta, Ga.; Birmingham, Ala.; Chattanooga, Tenn.; Clarksburg, W. Va.; Fairmont, W. Va., and Knoxville, Tenn.

It is impossible to assign to individual States the investments represented by railroad bonds, but it may be said that practically every great system operating within the territory, such as the Atlantic Coast Line, the Seaboard Air Line, the Southern, the Mobile & Ohio, are represented and, in large measure, by their constituent lines.

Among the many lines, constituent or independent, are included the Aberdeen & Ashboro, Alabama Central, Alabama Great Southern, Alabama Midland, Alabama & Vicksburg, Atlanta, Knoxville & Northern, Carolina Central, the Central of Georgia, Columbia & Greenville, Chattanooga, Rome & Southern, East Tennessee, Virginia & Georgia, Florida Central & Peninsular, Georgia Railroad & Banking Co., Georgia & Alabama, Georgia, Carolina & Northern, Georgia Pacific, Georgia Southern & Florida, George's Creek Coal & Iron, Mobile & Birmingham, Norfolk & Carolina, Northeastern, Petersburg, Raleigh & Augusta, Raleigh & Gaston, Richmond & Danville, Richmond & Petersburg, Richmond-Washington, Raleigh & Augusta, Sanford & St. Petersburg, Savannah, Florida & Western, Seaboard & Roanoke, Virginia Midland, Wilmington & Weldon, Western of Alabama, Western North Carolina, and Wheeling Terminal.

It is thus seen that 121,501 comparatively small investors in Baltimore are immediately interested in the welfare and prosperity of ten great Southern States having an aggregate area of 436,614 square miles and an aggregate population of 18,776,059, using 1910 census figures, through the railroads operating in them which Baltimore money has helped to build, extend or equip, and that the people of 35 cities having an aggregate population of more than 1,789,019 in nine of those States must have more than casual interest in Baltimore, which has thus helped to finance municipal improvements of various kinds and the development of their public utilities.

If all of the Southern States, including Maryland, Missouri and Oklahoma, should be included in this exhibit, the importance of these three mutual savings banks in Baltimore becomes greater. Their investments of the kind in Maryland, including some little

in the District of Columbia, aggregate \$11,321,294, and directly and indirectly in Missouri, Arkansas, Oklahoma, Louisiana and Texas, \$4,263,910, including State bonds and the securities of Dallas, Galveston, Houston, San Antonio and Waco, Tex.; New Orleans, La.; Oklahoma City, Okla., and St. Louis and Kansas City, Mo. Therefore, bond investments in the whole South of Baltimoreans by way of these three mutual savings banks aggregate \$38,692,220, which is equal to 57 per cent. of the total amount of deposits in the institutions.

That more than \$11,000,000 of such investments, which do not include \$9,979,449 loans on mortgages or other local investments, should represent Baltimore or Maryland enterprises is perfectly natural manifestation of community of interest on the part of Baltimore institutions. But that the other investments take a wider range is a striking evidence of the far-seeing conservatism of the officers and directors of the savings banks charged with the responsibility for the funds of so many small investors, an adaptation of the accepted policy of wisdom in not keeping all of one's eggs in one basket. That in the wider distribution of the funds for investment in bonds more than 38 per cent. of them have been placed in the section of the South most closely allied to Baltimore historically, commercially, financially and socially is a token of the confidence in that section among the substantial men of Baltimore, and is fairly indicative of the general trend of all Baltimore investments of the kind.

SCOTCHING LEGISLATIVE RIDERS.

CONGRESSMAN JOHN A. MOON of Tennessee was singularly unfortunate in using the attempt to open about 2500 offices to the "faithful" as a basis for an argument against federalistic tendencies in the National Government. President Wilson has the backing of the intelligence and patriotism of the country in his successful stand in the matter of the removal of about 2500 assistant postmasters from the protection of the civil-service regulations, as was proposed in the postoffice appropriation bill. In the light of developments in connection with two or three recent bills, the country had come to look for attempts at spoils raids in congressional action upon every occasion that presented the slightest chance. The deepest interest, however, turned, not upon the consequences of such raids in the conduct of the people's business, but upon the fact that the proposition so vigorously defended by Congressman Moon was a rider upon the appropriation bill.

Congressman Moon is not an inexpert on riders, though he is hardly a consistent political philosopher. He seems at present to imagine that if 2500 assistant postmasterships shall not again become open to office-seekers, a tremendous impetus will be given to a Federal menace to human rights and human liberty. He says:

Your Government is being consolidated. It is based on the theory of ultimate supreme power under a system of Federalistic domination and construction of the Constitution.

You are drifting rapidly to the exercise of central power. If you adopt the policy of the purchase of telegraphs and telephones, you will have proceeded far to the Federalization of power. You will have added thousands of offices to your Government. If you go further and become the owners of the railroads, you will see a vast army of people who would be in control, a Federal menace to human rights and human liberty.

But the menace in such ownership and operation and in the spoils thereunto pertaining is as nothing compared to the Federal menace to human rights and human liberty grounded in the rider on the Postoffice Appropriation Bill of August, 1912, in which Congressman Moon played no unimportant part.

That rider providing for the regulation of the newspaper press of the country was, in its earlier form, such a radical departure from fundamental, constitutional and wise principles of American life that even a socialistic member of Congress described it as "a grave attack upon the liberty of the press." To the drastic provisions of this rider, so utterly obnoxious to the theory of Government which Congressman Moon now thinks he is defending, was added by way of amendment in the conference, removed from publicity, a provision which had not been discussed in either house of the Congress.

On behalf of the managers of the conference on the part of the House, Congressman John A. Moon, on August 23, 1912, obtained unanimous consent that the reading of the conference report should be dispensed with, and that, in its place, a statement of the conferees should be read.

There is circumstantial evidence in statements openly made in Congress and not denied that there was not in the hall of the House of Representatives a quorum of members called for by the Constitution to do business when the bill carrying this rider went through the form of its final passage, and it is questionable whether more than half a dozen members of the Congress present were aware of the addition that had been made in the conference, although both the full conference report and the statement were printed. The *Congressional Record* of August 22, 23 and 24 ought to be studied by the people of the country as throwing light upon the confusion that prevailed in the closing hours of the legislation.

The ghost of that remarkable incident will not down. It rose even while Congressman Moon was on the verge of the assistant postmaster rider, when Congressman Treadway of Massachusetts offered an amendment repealing the newspaper publicity rider of August 24, 1912. Mr. Treadway said:

As I understand it, this feature was inserted in the postoffice bill two years ago in just the manner that we have been discussing here this afternoon. It was some sort of a rider * * * and I claim, Mr. Chairman, it is of such an inquisitorial nature that newspapers should not be subjected to it.

But Congressman Moon made a point of order on Congressman Treadway's amendment, and the chair sustained the point.

In complying with the provisions of this rider, which the Attorney-General of the United States had declared to be "in derogation of common right," we said:

The information sought to be elicited by the law of August 24 is information that the MANUFACTURERS RECORD, together with the great body of the American press, has no reason for concealing, except in maintenance of the right of any business man to be protected against the advantage that might be given to his competitors in publicity of the legitimately private details of his business and, more especially, in defense of the freedom of the press, guaranteed by the Constitution. Granted the right the Federal Government to exercise control over newspapers, as in this instance, and the way is immediately opened for the Federal Government to control any phase of newspaper work, even to barring periodicals from the mails if they should carry editorial matter or news offensive to the administrator of the law. The precedent is set for the absolute elimination of freedom of action on the part of effective mediums for public discussion in this country and for the destruction of every safeguard of individual liberty.

This criticism was of a particular rider, an emphatic illustration of the evil, inherent in all riders, placing upon a bill that must be passed to meet the necessities of Government some unallied provision which it would be impossible to enact into law if it were open to free discussion on its own merits. When to that policy is added the ability to graft upon a bill in the secrecy of the conference matter which the Congress has not been able to discuss fully in the open, the evil is intensified. This rider practice has been growing since 1911, and it was about time for an effective checking of it. Dangers inherent in the practice of attaching substantive legislation to appropriation bills have been frequently pointed out by former Presidents of the United States. The only attempted justification that has been offered for such a practice is that it has been found a convenient method for facilitating the passage of measures which are deemed expedient by all the branches of Government which participate in legislation. But no condition of urgency has been disclosed for the riders which have been carried on bills that have become law since last April. On the contrary, nearly all have assailed a rule in Government that has demonstrated its value to the country. Therefore, the press of the country should so assemble substantial public opinion that even though politicians in Congress shall make it necessary for any President to veto an appropriation bill carrying an obnoxious rider, they will not dare to override the veto, and will be compelled to take the responsibility for any embarrassment of Government that may ensue.

STEELMAKING AT TIDEWATER.

WHETHER or not there is anything in the rumor that President Schwab of the Bethlehem Steel Co. is considering the purchase of the Maryland Steel Co., there is one reason which would make a deal of this kind especially appropriate.

The Pennsylvania Steel Co., which owns the Maryland Steel Co., has about 600,000,000 tons of iron ore in Cuba. This is about as much as the United States Steel Corporation owned when it was organized. The Bethlehem Steel Co. also owns a large body of ore land in Cuba in close proximity to that owned by the Pennsylvania Steel Co. A consolidation of the two interests would provide practically unlimited iron ore for many years to come for these two companies, putting under one control probably a much larger amount of ore than that owned by any other company in the world, except the Steel Corporation.

The Bethlehem company has not developed its Cuban ores. The Pennsylvania Steel Co. has developed its property to such an extent that an increase of furnace capacity is important in order to utilize these vast supplies of ore ready for the market.

The plant of the Maryland Steel Co. is better located for a great steel industry than the Bethlehem plant. Ores coming to Sparrows Point do not have to be reshipped by rail, as those to Bethlehem. Finished products for any point along the Atlantic or Gulf coasts or for foreign trade turned out at Sparrows Point have very great advantage in transportation over the products at Bethlehem.

It is practically certain that the Pennsylvania Railroad will have to divest itself of its ownership of its stock in the Pennsylvania Steel Co.

It is absolutely certain that President Schwab proposes, if his life be spared, to make the Bethlehem company one of the greatest iron and steel concerns of the world. He has the combined genius of managerial ability and technical skill. It was to him that a very large part of the success of the Carnegie Steel Co. was due, and it was largely his work that brought about the organization of the United States Steel Corporation. He is comparatively young with the command of abundant capital and an ambition for business development which practically guarantee that his company will fully share in all the broad expansion of the steel interests of the country. It will be a very logical outcome of his ambitions, of his abilities, his command of money and of the strategic location of Sparrows Point, if that property should come under his control.

Considering the possibilities of increasing trade in iron and steel products along the Atlantic and Gulf coasts, in South America and in other foreign regions, the Maryland Steel Co. is one of the best located iron and steel plants in the world. If the Bethlehem Steel Co. should come into possession of the Maryland Steel Co.'s plant, an expansion in keeping with Schwab's abilities and with the natural advantages of the location would be almost inevitable. And it is difficult to suggest how great such a plant under such conditions would become.

WIRELESS TELEGRAPHY ON RAILROADS.

WIRELESS telegraphing from and to vessels on the high seas is an old story, but the same art similarly applied to trains on railroads is quite new, although experimenters have been busy with such an application of it for some time. Conditions for the use of wireless messages in connection with railroad transportation have been considered especially difficult by reason of supposed obstacles surrounding them, but which now seem to have been overcome in the case of a train on the Delaware, Lackawanna & Western Railroad recently, when wireless telegrams were sent and received alternately as the train sped along at any speed, one of the messages being dispatched when it was racing on at a rate of seventy miles per hour. The test was made on the line between Hoboken, N. J., and Nicholson, Pa., whither the train carried a large party of civil engineers to view a large concrete viaduct which the railroad company is completing on a cut-off route. A number of messages were sent and received, and the

feasibility of wireless telegraphy in connection with railroad transportation under favorable weather conditions was demonstrated. How it will work in bad weather remains to be seen, although there appears to be no fear entertained on that account, as it is stated that the company is erecting wireless stations so that its entire line from New York to Buffalo will be covered by the wireless apparatus.

The value of this new method of communication on railroads is so apparent as to hardly demand comment, but it may be remarked that its use to obtain prompt relief for disabled trains will be alone of great importance in expediting the movement of traffic, because a message can be sent from a train in trouble with no delay, which is ordinarily unavoidable when a trainman has to be sent to the nearest station and maybe has to hunt up a telegraph operator if the station be one of those which are closed at night. In many instances this would mean that the time required to obtain assistance would be cut in half. Messages could also be sent to or from passengers on through trains, a method of communication now impossible even in emergencies for the reason that the stops made by such trains are so infrequent as to sometimes necessitate great delay while waiting for it to arrive at a station upon its schedule. Business men will appreciate this and welcome the day when all railroads will equip their trains with wireless telegraph apparatus. It will be possible also for train dispatchers to use the system to communicate directly with conductors on moving trains and maybe prevent wrecks when someone has made a mistake. The public will be glad when such use of Marconi's invention has become general.

AMEND THE INCOME TAX LAW.

SEVERAL weeks ago the MANUFACTURERS RECORD advised every person liable to the Federal income tax to embody in the return of income required some such statement as:

This return is made subject to rulings that may be made by the courts of the United States upon provisions of the income tax law or upon regulations framed by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury with the purpose of applying the provisions.

That suggestion was made so that taxables would be assured of their rights under any court decision. It is gratifying to note in correspondence from Washington that the idea in this suggestion is being emphasized in a determination on the part of some taxables to make their returns under protest, on the ground that the Congress has no constitutional right to impose the conditions and the responsibilities involved in withholding the tax at the source of the income.

It is impossible to imagine that, unless the Congress shall speedily amend the income tax law to meet the justified criticism of intelligence that has tried to fathom the unintelligibility of a large portion of the measure, the United States courts will presently be crowded with actions which patriotism will be obliged to begin even at self-sacrifice.

Statesmanship at Washington ought to do all within its power to remove the many causes for such actions and thus save the Government and the people unnecessary expense and trouble. If not, indeed, prevent the political and financial embarrassment that will flow from a decision of the Supreme Court declaring vital provisions of the income tax law unconstitutional. There may be a subconscious impression in some quarters that the judgment of the United States courts will be swayed against a decision declaring the law unconstitutional, either by threats which have already been uttered by irresponsibility and ignorance to the effect that the courts will be disciplined in case of an adverse decision, or by the plea that such a decision will deprive the Government of millions of dollars of expected revenue. Neither question ought to influence the courts, and a decision of a few weeks ago, having a direct bearing upon the income tax law, by which the Government was obliged to refund more than \$1,000,000 of excise taxes is a fair indication of the mind of the Supreme Court.

Wise statesmanship will meet the views of citizens, interested or disinterested, who think for tomorrow and for the next day, as well as for today, who feel that broad and deep knowledge and not

narrow and partisan blindness should dominate in the framing of tax laws to the end that such laws shall not become the means of oppression and injustice, but shall fulfill their purposes in equity and righteousness, and who are convinced that the inadequacy manifest in almost every paragraph of the income tax law is responsible for failure of that law to measure up to the requirements of constitutionality, legality and common sense.

Within one month of the day when returns of income must be filed with the collectors of the internal revenue, the people of this country are in a maze of doubt which has been complicated by the essays in the Bureau of Internal Revenue to frame regulations for carrying out legal impossibilities, regulations reflecting naturally the muddledness of the language of the law and its contradictions, but, at the same time, going beyond the provisions of the law, in some cases, and, in others, directly contrary to its provisions.

The people should be relieved at once of the anxiety and confusion brought upon them by this law, which, for amateurism, narrowness and obscurity, has never been equaled in Congressional legislation. Analysis of it in the light of developments as it passed through the Congress traces its inherent evils to—

Its being aimed against a special class.

Its presumption that that class is dishonest or grossly selfish.

Its theory that it is better for ninety-nine innocent persons to suffer than for one guilty person to escape.

The haste in which it was placed upon the statute book, only 65 hours having been spent in open discussion of it on the floors of both houses of the Congress.

In amending the law the mistaken view as to the integrity of the great mass of thrifty and substantial people of the country, a view which may pass sincerely in politics of the troglodyte order, should be disregarded, and 65 hours at least should be spent in eliminating the flagrant imperfections.

Simplicity of action for taxables and for the Government can be assured by substituting the principle of giving information at the source of payment of income for the policy of withholding at the source the tax on income. To make that substitution will require less than a dozen amendments, which were sketched in the MANUFACTURERS RECORD of November 27.

A few words changed will clarify the bewildered provision as to the incomes of a married couple. As it passed the Senate that provision was clear and equitable. In the privacy of the conference some of the Senate provision was eliminated without, however, changing the general intent, but there was added the thoroughly characteristic provision as to the "aggregate income" of man and wife directly contrary to the whole theory of the income tax law that contemplates taxation of the individual.

There are other changes necessary. It may be enough at this time to urge that the law be amended without dealing with other details. As the New York Sun says:

The income tax law must be revised. As we have said, the honest taxpayer has rights entitled to respect by the Federal Government.

THE FORGOTTEN PUBLIC.

HENRY FORD of Detroit must be given credit for honesty of intention and for good motives in his plan for dividing the enormous profits of his automobile-making concern with his workmen. But there is another side to the question and another way in which Henry Ford could probably have done more good to his fellow-men than the method pursued.

There are probably ten users of Ford automobiles for every workman engaged in the making of them. The automobile is a mighty factor in the work of civilization. It is today essential to the work of the physician and other professional men, and essential to thousands of farmers and salesmen. The more widely the automobile can be introduced into the country, the greater will be its blessings to humanity. If instead of making so radical a change in the wages of his employees Ford had cut the price of his automobile in half, or even 25 per cent., he would have benefited probably ten

people for every one benefited by the increase in wages to his employees.

The employer, as in Ford's case, owes a duty to his employees. But does he not at the same time owe a duty to his customer? Is the man who by buying his product and thus making possible the employment of his men less to be considered than the man who makes the product? If such a reduction had been made in the price of these cars, tens of thousands of people who cannot now afford to buy them would have been able to do so. The influence of this good work would not have been confined merely to his own cars. In making such a reduction he would have compelled the other automobile-making concerns of the country to reduce their prices and lessen some of the exorbitant profits which some of them have made. And thus millions of people, owning or using automobiles, would have been immensely benefited, and the good to the people of the country would have been greater than that which will flow from the advance in wages to his employees.

Ford's action, widely heralded throughout the land, would not have received such praise and such limitless advertising if it had taken the turn of a reduction in the price of his cars, but the good would have been greater.

In presenting this side of the case, the MANUFACTURERS RECORD is not, for a moment, suggesting that the employees should not be given every possible benefit of higher wages where this can be done, but that in considering the question of wages every industry must also consider the relation it bears to the consumer. We have become entirely too prone in this country to think only of the employer and employee, forgetting the great consuming class, which is always larger in numbers and more helpless to protect itself than the capitalistic class or the laboring class. Between the capitalistic class on one hand and the laboring class on the other, especially that represented by labor unions, the consumers, far more numerous than the other two classes combined, are ground between the upper and the nether millstone. It is time for the country to see the needs of the consuming or middle class of people, who rank neither with the capitalist nor with the union-labor element—the clerks, the teachers, the preachers, and all men and women of limited incomes who comprise the great bulk of the nation's population.

Henry Ford missed the opportunity of a lifetime when in doing what he regarded as a magnanimous thing to his own employees he neglected to think of setting an example to the world of protecting the consumer as well as the producer of his products.

EASTERN VIRGINIA TRUCK.

Problems in the Handling of the \$12,000,000 Crops.

[Special Correspondence Manufacturers Record.]

Oceana, Va., January 24.

Trucking operations for Virginia are confined to portions of six rather small counties in the southeastern corner of the State, viz., Norfolk, Princess Anne, Nansemond and Isle of Wight, and two counties over on the Eastern Shore, across the Chesapeake Bay, Northampton and Accomac. In the year 1913 from the counties named there were marketed fully 2,750,000 barrels of Irish potatoes, more than 1,000,000 barrels of sweet potatoes, 750,000 packages of cabbages, berries and onions, and more than 1,500,000 miscellaneous packages of other perishable truck crops, making a total of 5,500,000 packages, representing at least estimate between \$12,000,000 and \$15,000,000 gross sales. The amount of capital involved in this great work, including the factories engaged in making packages in which to ship this great volume of produce, has been closely and carefully compiled at \$100,000,000.

If it were not for the many great advantages which Southeastern Virginia possesses and enjoys, competition from other sections would have caused a curtailment of the trucking industry in Virginia. The matter of proper distribution of the great volume of products of the soil is now engaging the close careful attention of the thinking men engaged in the work. It is generally conceded that while there is not really a surplus amount of such crops grown, the crops not being properly distributed, a glut is frequently the re-

sult, and prices are slaughtered. Two important features connected with the trucking work must be considered by the trucking fraternity. The truck must be sent to market in better shape, must be more carefully packed and handled, a thing hard to control with irresponsible, careless hands, and some of the expense between producer and consumer must be eliminated.

The cost of living is not always the fault of the producer. As regards the price the consumer pays, more especially in the case of the perishable fruits and vegetables, such as the products of the soil in the Virginia trucking area, there is too much of a chasm between producer and consumer, and into this gap too much is swallowed up. The producer, for example, receives, say, \$1 a barrel for his spinach, a crop just now moving to market in large quantities every day, and the consumer of that "dollar-a-barrel product" pays at the rate of \$3 to \$5 the barrel. The producer gets too little to give him a legitimate profit, and the consumer pays too much, and the bulk of the money involved goes to those "who labor not," but at the same time wear fine clothing and live on the fat of the land.

And right in the face of the significant facts, figures and features connected with the making and marketing this twelve to fifteen-million-dollar crop comes the demand on the part of the men between producer and consumer for more pay for handling the \$1-a-barrel spinach above referred to.

The trucking work, as regards profit, or as regards supply and demand, is worked up to its limit. The producers must not bend their energies in the direction of increasing their output, but may wisely reduce their truck acreage somewhat, more carefully assort and pack their products, and raise more of the regular staple crops, such as they are now compelled to purchase, and manage in some way to lessen the width of the great gap between producers and consumers. The great army of "men between" is increasing every year, for "few die and none resign," and the farmer feeds them all, clothes them all, and at divers and sundry times cusses them all.

This is a fine field for practical political economists to work in. It is a matter that is just at this time being carefully discussed.

A. JEFFERS.

MAGNETIC IRON ORES.

Undeveloped Resources of a Highland County of North Carolina.

Jefferson, N. C., January 22.

Editor Manufacturers Record:

Actuated by the interest that one would naturally have in his own section, and a desire to publish to the world some of the advantages which might interest outside capital, I wish to call particular attention to Ashe county, North Carolina. As will be observed from the map, this county lies in the extreme northwestern part of the State, adjoining the States of Virginia on the north and Tennessee on the west. It is a mountainous, plateau country, lying immediately west of the Blue Ridge and having an average elevation of about 3000 feet. With its undulating hills and mountains of original forest it is unsurpassed for its scenic beauty and natural wealth. The late Governor Charles B. Aycock often spoke of Ashe as the best county in the State. It is the great grazing county of the State, and on the hills and mountain sides can be seen herds of the finest livestock, while at the same time it is admirably adapted to the raising of corn and the smaller grains, as well as fruits and vegetables. No finer flavored apples can be grown in the United States, and if the orchards here had the same attention given them that is given to the commercial orchards of Washington, Oregon, California or Colorado the finest apples in the world would be the result.

Yet most of the county's wealth is in the natural resources, such as hardwood timber (most of which has been bought up by lumber and milling men); the abundant water-powers to be found on the North Fork and the South Fork of New River, where enough electricity could be manufactured to operate almost any industry that might be established; and lastly, the great mineral wealth of the county, consisting of iron ores, copper and other minerals.

Many years ago Ore Knob was extensively worked for copper and many thousand dollars' worth of the ore was hauled to the railroad, a distance then of 40 miles or more, and shipped to other sections of the country

for the refining processes. This property is now in ruins, but with railroad facilities would probably prove to be very valuable. The mines were never exhausted when operated in the eighties, and it is thought that there is untold wealth there now awaiting opportunity.

But the principal mineral wealth of the county is in the very high-grade magnetic iron ores, the county being crossed by three different veins of this ore. At places the veins come to a feather edge at the surface, but growing rapidly in thickness as depth is reached. At other places the veins are several feet thick at the surface—from a few feet to 30 or 40 feet. Considerable development work has been done, and the veins almost invariably increase in thickness as depth is reached. They have an incline dip of from 45 to 52 degrees, and extend to an unknown depth and are found imbedded in a formation of crystalline rock mostly of gneiss and schist. These ores are as fine as the world affords, having taken premiums at different "World's Fair" exhibitions. In fact, they are in the main nothing less than vast deposits of crude steel of the highest grade and particularly noted for its toughness and hardness. Outcroppings appear on hills and mountains and in the river and creek beds of the county, as the veins extend from northeast to southwest in the direction of the famous Cranberry mines in Avery county, formerly Mitchell county, being a part of the same lead of ore. Many samples from the Ashe county ores have shown as much as from 60 to 68 per cent. metallic iron. Only one or two properties have been purchased by those interested in the manufacture of iron and steel, while the great bulk of ore remains in the hands of the original owners. These ores were worked many years ago, more than 100 years ago, in the old-time catalan forge, run by water-power, and the manufactured iron was used by the citizens for wagon tires, horseshoes and the manufacture of farming implements of many kinds then used by the mountaineers, and was said to be far superior to any other iron obtainable at the time.

Before the days of railroads many tons of this iron was made into bars and hauled as far as Charlotte, N. C. and even on to Charleston, S. C., where it was prized above all other iron on the market. During the war between the States the Confederate Government had this ore manufactured into octagonal bars of iron for the purpose of making gun barrels. These bars were known as "gun scalps," and the Government officials reported that they made the finest guns in the army. At that time the "scalps" were delivered to the authorities of Wytheville, Va. Some of the ore was manufactured in the catalan forge in this county as late as 1887. But the cheaper and lower grade of manufactured iron, of course, made it impossible for this process to continue, and about that time the enterprise was finally abandoned.

Notwithstanding the quality of these ores, they have remained in practically the same condition as they were when Columbus discovered America. Why? Simply because of a lack of transportation facilities, no railroad having been built into this, the greatest mountain section of North Carolina. But these conditions are now changing. The Virginia-Carolina Railroad, owned and controlled principally by the Norfolk & Western, is building a line of road from Abingdon, Va., through the greatest timber and mineral sections of the county. With this new railroad entering the county I feel that there are great possibilities for the investor and the manufacturer. It is a country almost untouched by the great interests, and, moreover, it is a land of unsurpassed climate, where the summer tourist can drink deep of the fresh mountain atmosphere and to his satisfaction from the pure cold springs that flow from the verdant hillsides and mountain slopes.

R. L. BALLOU.

To Build Big Sulphuric Acid Plant.

A plant with an annual capacity of 20,000 tons of sulphuric acid will be built at New Orleans by Swift & Co. of Chicago. This plant will supply the company's large acidulating and bagged fertilizer establishment at New Orleans. A water-front site of 27 acres of land with 24 feet of water has been secured as site for the new plant.

The article by George Eames Barstow of Barstow, Tex., on "The Courts and the People," published originally in the Dallas-Galveston News, has been republished in attractive pamphlet form.

Sunshine in the Business World

[Editorial Correspondence Manufacturers Record.]

Daytona, Fla., January 21.

In the business world a thunder-storm, with its death-dealing lightning flashes, has for some years covered the land. Ten years ago the keen-of-hearing could faintly catch the rumblings of the coming storm. It steadily grew louder and burst with terrific force upon the country in 1907. It has not been a gentle summer rain, with the sound of distant thunder, but it has been the fierce cyclone, sweeping all before it, or the sharp, savage crash of the lightning, hitting the innocent and the guilty. All have suffered. Occasionally during the last few years there have been glimpses of sunshine, only to be succeeded by dark clouds and downpours. The storm has spent its force. The clouds are breaking away and sunshine again begins to brighten the earth, or in this case the business world.

Changing the metaphor, we have had 10 years of economic revolution, of wild sensationalism, of the whirl of the "Big Stick," with preachers of the gospel of hatred riding into power on the wave of political discontent aroused by their own evil work. But as the thunder-storm, terrific though it may at times be, destructive as it often is, clears the atmosphere and gives a new and fresher life to vegetation, so the storm through which the country has been passing may have done, and doubtless has done some good. It has made all classes see things from a different point of view. The employer has been set to striving more vigorously to better the conditions of his employe, and though the laboring man has often been misled by agitators and demagogues, he, too, is awakening to a better consciousness of his duty to the employer and to his fellow-men.

The destructive warfare of capital as sometimes handled against competitors is not likely to exist in the same form again any more than it is likely that labor unions will again sanction, to the same extent as many have done in the past, murder and all other atrocities in pursuance of their designs. It is not likely that the warfare of dynamite will be continued as formerly, any more than it is likely that great corporations will pursue a cut-throat policy against competitors in place of the modern spirit of co-operation, for which Judge Gary of the Steel Corporation has for years been the most conspicuous leader. When the true history of the change that is taking place is written, Judge Gary and those who joined him in his magnificent work of co-operation instead of cut-throat competition, will be awarded due praise for having accomplished more in the betterment of business relations between corporations and between employers and employes than all the politicians of these latter days.

Some day the real story of the work of these dinners in reconciling men and harmonizing differences, eliminating personal ill-feeling and bringing competitors to see each other face to face and eye to eye, and in developing a general sentiment in behalf of the laborer in the iron and steel trade, will have to be written. Then the world will understand better than it has yet done the influence of the co-operative spirit and friendship developed through the leadership of Judge Gary.

At one of the meetings of the American Iron and Steel Institute, which was an outcome of these dinners, nearly a whole day was devoted to the discussion of the brotherhood of man, the golden rule in business and the necessity for doing everything possible to advance the welfare of the employes of the great iron and steel works of this and other lands represented there by the foremost metallurgists of the world. After an address by Vice-President King of the Jones & Laughlin Company of Pittsburgh on the "Golden Rule in Business," a distinguished metallurgist arose, and, strongly commenting the position taken, said: "All that has been said here today is merely the hastening of the day of the coming of the Prince of Peace on earth," and this was enthusiastically applauded.

At that time the MANUFACTURERS RECORD took the ground that the work of the Gary dinners and of the American Iron and Steel Institute, which grew out of these dinners, would have a world-wide influence in re-shaping all business interests and in developing a broad spirit of co-operation among all classes and in all industries. The iron and steel industry was given the credit for having set a new standard of ethics for the world's business.

President Wilson's splendid messages and addresses in behalf of peace and harmony in the business world

and suggesting co-operation between the Government and the business interests of the land, rather than hostility, go forth with the power that comes from his position as the head of earth's greatest nation. He has, however, but voiced the thought of nearly every speaker at the Gary dinners and at the meetings of the American Iron and Steel Institute. He has but taken the text on which Judge Gary preached so often and so vigorously, and has amplified it and given it a world significance based on the power of the Presidential office.

In this connection I am reminded of an exceptionally happy speech made by President Clark of the Lackawanna Iron & Steel Co at one of the Gary dinners. When the first dinner was given 80 or 100 of the iron and steel masters of the country were in attendance. Many of them were competitors in the bitterest sense. They had been trained, as some of them later admitted, in the school of Andrew Carnegie to get business, and get it regardless of cut-throat competition, regardless of whether your competitor could live or had to die in the fight with you. This school had taught the doctrine of every man for himself and the devil take the hindmost. Business was warfare, and Carnegie was a pre-eminent leader in business warfare and in training men like Schwab and others to follow the merciless methods of the day. At the first dinner there was a certain degree of chill in the air. Men who were bitter competitors did not believe that there was a basis for co-operative friendship in their industry, and later on, as they grew to know each other better, they frankly admitted this.

After two or three dinners, during which these great leaders had learned to know each other and had studied each other's methods and co-operated where co-operation was possible, President Clark was called on to make an impromptu address. He said that a few minutes before, when the magnificent vases of flowers which had decorated the tables were removed, he missed their beauty and their fragrance. They had, however, obstructed the view from table to table, and so long as they remained it was difficult to see others than those in elbow touch with you. But after the flowers had been removed he looked from table to table and his thoughts went back to a few years before, when the flower of prosperity had bloomed so abundantly that men in the same trade did not know each other and could not see each other in friendly intercourse. "But now," said he, "as these flowers have been taken from the table, so the flower of prosperity has been taken from us and we have come to see each other face to face and eye to eye. It seems to me that what we are gaining in this personal touch of friendship is worth all that the depression through which we are passing is costing us." That happy speech voiced the sentiment of the men who from time to time met in friendly intercourse at these dinners.

The discussions always dealt with the higher side of business life, with ethics of the highest order both as to the relation of these men to each other, their relation to their customers and the relation which they bore to men in their employ. "As for me," said one speaker, "I hold that I am but a trustee, not only for the people whose money is invested, but for every laborer in our employ and for the families of the laborers who may pass away." This sentiment, expressed by the head of a great English steel company, only voiced the universal sentiment expressed at all of these gatherings. The discussions of the whole day had been along that line and in harmony with the sentiment that the work of the day meant "the hastening of the day of the coming of the Prince of Peace on earth."

To the work of these leaders in the iron and steel trade, under the splendid inspiration of Judge Gary, much of the better sentiment that today prevails throughout the land as to man's relation to his fellow-man is due. There were no spectacular speeches made to the galleries, because these meetings were not reported to the newspapers and the galleries were not there to hear. These speeches were but the quiet talks of men impressed with the tremendous responsibility which rested upon them as the controlling factors in the greatest manufacturing industry of the world. These men may not themselves have quite grasped the fact that the gospel which they were preaching would soon have so many converts. But no man could have intelligently studied what they were doing and noted its influence upon these men and upon the interests which they repre-

sented without realizing that a force of tremendous power had been projected into the business world.

Never have I heard from the pulpit or from teachers of moral philosophy higher ethics as to man's relation to his fellow-man than I heard again and again in the quiet talks of these men as they voiced their interest in the welfare of their employes and their competitors. The one thought ran through nearly every address at nearly every dinner, and later at the meetings of the American Iron and Steel Institute, was that whatever might happen, the last thing to be done to save the industry from destruction, if conditions should reach that point, would be the reduction of wages. Political economists were at that time talking about the liquidation of securities and of business as necessarily to be followed by the liquidation of wages, but these iron and steel men, employing hundreds of thousands of men, took the ground that wages must not be reduced. Moreover, they urged that everything possible must be done to better the housing conditions of the laboring classes and to add to the comforts and pleasures of their lives.

Turn from these thoughts in connection with the influences set in motion by these steel men, and which are now finding voice in all the papers of the land, to President Wilson's addresses, and to the general spirit of harmony and co-operation, signs of which are in evidence everywhere. When President Wilson last week suggested that this was not the time for warfare between the Government and business, but for co-operation in finding out the best ways in which to meet all the problems of the day in a spirit of co-operation, he put the stamp of national approval, so far as a nation's feelings can be voiced by a President, upon the work which the iron and steel men did during the stormy times of 1907 and 1908. At that time wreck and ruin were staring everyone in the face; the lightning was hitting and withering many a good man as well as some bad ones. Even then, in the days which tried men's souls, the steel men of the country were vigorously, calmly but determinedly trying to lead the way to co-operation between man and man, between corporation and corporation, and between business and the Government. At all of these gatherings emphasis was constantly laid upon the fact that business interests must in every way possible conform to the laws of the land.

And now that the storm clouds have passed away and the sun comes forth again, the business interests of the country ought to revive with the vigor with which after a mighty downpour in the spring the earth blossoms forth when the sun with its genial warmth gives life to vegetation.

We have solved some of the seemingly almost unsolvable problems which the nation has been facing for many years. We have made a move away from that abomination of banking, the old national banking system, the usefulness of which the country had long outgrown, by a new currency system which, though it may have rough corners to be rounded out, will sooner or later give us a banking business worthy of the matchless resources of the country and the tireless energy of the people of this land.

Business will be unfettered by the change.

We have done mighty things in the past. Our progress has amazed the world. We have grown in power and wealth as no other nation ever did. Our people are better housed, better fed and better clothed than any other people in the world's history have ever been. Education has been more widely diffused. We have to a large extent assimilated the millions and millions of foreigners who have come to our land, though we have now come upon a time when less of the present immigration would be desirable. Notwithstanding all of these facts, we had reached a point where progress commensurate with our advantages would have been held up by our old banking methods.

The business men of this country, the great leaders who have created its vast railroad and industrial and financial power, have not, as a general thing, willingly or knowingly, been violators of the law. Of recent years, however, they have been held up to public scorn as though they were common cut-throats or thieves. Some have done evil, but many have done good, and the good have been denounced as bitterly as the evil doers. Few men in great business interests have known just where they stood. If they had innocently violated the laws they would have been glad to find a way to comply with the nation's requirements, but it was difficult and often impossible for them to know what the law was, for different courts put different interpretations on it.

Instead of hounding men to such an extent as to lessen both their physical and mental vitality and make them unwilling to go on in any new development work

for the country's upbuilding, President Wilson now proposes that this spirit of bitterness be put away and that the laws be so shaped that men may know exactly what is legal and what is not. He proposes that in a spirit of broad co-operation the Government and business men of America may unite for another great advance movement of the country's business interests. If this policy be pursued in legislation at Washington and in

the capitals of the States, and the demagogues be forced to the rear, then indeed will this country enter upon the broadest development it has ever known with a wider prosperity for the employer and the employe, and then indeed will there be a hastening of the day proclaimed by the steel men whom I have quoted, "of the coming of the Prince of Peace on earth." R. H. E.

Fertilizer Materials in Atlantic Coast Fisheries

In helping the manufacturers of soil fertilizers to increase their output, the United States Department of Agriculture believes that the interests of the farmer are enhanced. The use of fertilizers to supply nitrogen to the soil is of continually increasing importance to our agricultural population. Fish refuse has proved an important source of organic nitrogen for fertilizing purposes, and the necessity of preparing it in commercial form has led to the development of the fish-scrap industry in the Atlantic States.

The Department has, therefore, been conducting investigations, results of which have just been published in a pamphlet entitled, "The Fish-scrap Fertilizer Industry of the Atlantic Coast," with a view to assisting the development of this industry.

There are at present about 40 factories on the Atlantic coast, whose main output is fish scrap and fish oil manufactured from the menhaden. These are found all the way from Maine to Florida. The business reached its high-water mark as long ago as 1884, and the profits since have never been so great, owing to the reduced price of oil and scrap resulting from the competition of other products. This is true, notwithstanding the improvements that have been made in the methods of industry. The annual output in oil and scrap has not varied greatly from 70,000 tons of scrap and 35,000 barrels of oil during the past 30 years. There has been no growth in the recent past which would warrant a belief in a growth in the future. However, there seems every probability of a steady demand for this fertilizer.

The great success which fish scrap has met with as a fertilizer is due in part to the fact that, besides containing nitrogen, it furnishes organic matter to the soil, which inorganic fertilizers do not do. Ammonium sulphate, an inorganic substance, a by-product of coke ovens, supplies almost 50 per cent. of the nitrogen used as fertilizer in this country.

Should there be a sudden improvement in the coking process by which all the ammonia liberated in the old form of coking oven may be recovered, this amount would be more than enough to supply all the fertilizer trade. In that case the preparation of fish scrap would become commercially infeasible, but it is much more probable that the increase in the output of ammonium sulphate will keep pace merely with the growing demand, and that there will be a continued demand for fish scrap.

The menhaden is not generally considered edible, because it is "too bony" or "too oily." However, the menhaden when freshly caught and properly cooked is good to eat, although not so choice as certain other fish easily obtained. As the cost of food increases and sea fish are used for economy's sake to replace more expensive meats, there undoubtedly will be an increase in the use of the menhaden for food. The menhaden has actually been prepared as are sardines, and has been declared a complete success when so used. A meat extract has also been made from this fish, equal in nutritive value to that of beef. While this food has been known for many years, the process of extraction has failed to develop on a commercial scale. While there is no indication at present that consumption of menhaden is on the increase, the shortage of other food supplies might increase the demand, and this would be a matter of importance for the fish-scrap industry.

The waste from such fish as are now generally eaten forms a possible additional source of fish scrap. In the dressing of fish the waste represents an average of 25 per cent. of the "round" weight of the fish. The yearly catch of food fish in the Atlantic and Gulf fisheries is about 700,000,000 pounds. Twenty-five per cent. of this represents refuse suitable for the preparation of fertilizer. A considerable portion of this it is impossible to use economically, for the fisheries are scattered the whole length of the coast and many fish are shipped

to market undressed, and much fresh fish that is dressed is prepared on shipboard and the waste thrown into the sea.

Most of the refuse of Newfoundland cod is thrown away as fast as produced. An investigation has shown that 150,000 tons of refuse are produced annually on the Newfoundland shores, which would be equivalent to over 20,000 tons of dry scrap. As this is produced at a time when all available labor is engaged in dressing the cod, the problem of saving this refuse offers scant hope of solution.

The inedible dogfish furnishes another source of fish scrap for fertilizer, and horseshoe crabs are also reported to have been used in certain localities. The shells of crabs and lobsters have been found to be admirable as "fillers" for finished fertilizers. They contain a large amount of lime of high agricultural value, as well as a certain per cent. of nitrogen. At one fertilizer mixing plant on Chesapeake Bay over 250 tons of ground crab shells are used annually.

A belief exists among certain people that much food fish is destroyed in the menhaden industry along with the menhaden, but investigation by the Bureau of Fisheries has shown that this belief is not borne out by fact, nor does the supply of menhaden seem any less abundant today than in any time past. A word of warning, however, is given those operators whose crews take menhaden in the fall and early winter. If they catch spawning fish they run the risk of decreasing the supply.

The bulletin on the fish fertilizer industry also takes up the question of oils. The high prices obtaining in the early days of the industry led to its rapid development and a consequent overproduction in oil. Crude Northern menhaden oil in the New York market in 1865 brought from 80 cents to \$1.40 per gallon. During recent years the oil varies from about 20 cents to 30 cents per gallon.

Formerly menhaden oil was used principally as an illuminant and in currying leather. In addition it has long been used as a paint vehicle, as a lubricant and as a soap-making grease. Large quantities now are used in the paint manufacturing industry and in tempering steel.

Certain paint and oil specialists regard menhaden oil as the best of the fish oils. Paint made from it is especially suited for painting iron work, such as boiler fronts and smokestacks. It also holds up better in a moist climate, such as that existing near the seashore. Its use is specially recommended for replacing linseed oil in the manufacture of patent leather and similar products, and printing ink. The patent leather resulting is more flexible and less liable to crack, though it possesses a somewhat less glossy surface.

Much of the time when the employees of a fish-rendering plant are unoccupied should make it possible for the operators to spend more labor on their oil with a view to the improvement of its quality.

The bulletin on the fish-scrap industry is confined to the conditions as observed on the Atlantic coast only. The Department of Agriculture during the past summer has conducted an investigation on the Pacific coast of the United States and Alaska with a view to the more complete utilization for fertilizer purposes of the salmon and other fish cannery waste there produced.

The new bulletin contains a chapter regarding fishing and others regarding unloading, cooking, pressing and drying (old and new methods), and grinding and bagging. The locality of a factory is considered as well as the equipment of the average factory. The various uses of fish scrap, in addition to its use as a fertilizer, are described, viz., as chicken feed and cattle feed, and other important details are considered. There are a number of photographs and tables which should be of practical value to anyone interested in the fish-scrap industry.

National Canners' Association.

In connection with the seventh annual convention of the National Canners' Association in Baltimore next week a canning machinery exhibit will be given at the Fifth Regiment Armory in that city. Two or three thousand persons are expected to attend the meetings of the three branches of the industry, the canners, the machinery men and the brokers, and the program includes addresses on "Reciprocal Insurance," by John C. Bardwekk of St. Louis, Mo.; on "Important Factors Affecting Crop Production," by Dr. H. J. Wheeler of Boston, Mass.; on "Federal Government and Food Products," by O. B. McGlasson of Chicago; on "Links in the Chain of Distribution," by Col. John A. Lee of Chicago; on "Retailers' Confidence," by John A. Green of Cleveland, O.; on "The House Wife's Debt to the Canned Food Industry," by Mrs. Winifred H. Cooley of New York; on "Solving a Great Problem," by Hugh S. Orem of Baltimore; on "Catching Salmon," by Miller Freeman; on "Canning Hawaiian Pineapple," by Capt. J. J. Reynolds of Portland, Ore.; on "Export Trade in Canned Products," by Dr. C. L. Alsberg of Washington, D. C.; on "The Broker from the Jobber's Point of View," by Walter B. Tinns of New York; on "The Broker from the Packer's Point of View," by Samuel F. Haserot of Cleveland, O.; on "The Broker as Seen by Himself," by Willard Rouse of Easton, Md., and on "Legal Aspects of the Brokerage Business," by S. A. Williams.

National Builders.

The National Association of Builders' Exchanges, in convention at Louisville, Ky., elected Harry L. Lewman of Louisville, president; John Trainor of Baltimore, vice-president; J. M. Vollmer of Louisville, secretary; George C. Schroeder of Grand Rapids, Mich., treasurer, and I. Herbert Seates of Baltimore, general commissioner, with the following State commissioners:

Kentucky—A. J. Anderson, Louisville.
Indiana—C. C. Pierson, Indianapolis.
Tennessee—T. H. Evans, Nashville.
Ohio—J. A. Kelley, Columbus.
Michigan—C. A. Bowen, Detroit.
Pennsylvania—F. M. Harris, Jr., Philadelphia.
North Carolina—R. H. Pfaff, Winston-Salem.
California—Charles A. Day, San Francisco.
Alabama—W. Thomas Estes, Birmingham.
Washington, D. C.—E. R. S. Emory.
Maryland—S. T. Bennett, Baltimore.
Nebraska—Grant Parsons, Omaha.
Georgia—J. D. Wood, Atlanta.
Missouri—F. G. Boyd, St. Louis.
Florida—J. H. Kooker, Jacksonville.

Motor Buses for Houston.

The City Council of Houston, Tex., has authorized, according to a report from there, the operation of a motor omnibus line by Van Allen Bros. on Main street and other thoroughfares, subject to the regular traffic laws. It is said that three cars will be placed in service immediately, and if they prove a success as to patronage others will be obtained and similarly installed. It is further said that two of the experimental cars will seat 20 passengers, while the third will have a greater capacity, as it will carry passengers on top as well as inside.

To Manufacture Patent Cigar Boxes.

The Besser Patent Box Co., Jacksonville, Fla., has been incorporated with \$100,000 capital stock to build a plant for manufacturing patent cigar boxes designed to retain full strength of contents without deterioration, the capacity each week to be about 10,000 boxes. John J. Besser is president and treasurer; J. Abraham Rosen, vice-president and general manager. R. L. Hay is secretary.

Contemplates \$1,000,000 Improvements.

The Chattanooga Iron & Coal Corporation, C. E. Buck, president, Chattanooga, Tenn., contemplates improvements to cost \$1,000,000, including the construction of by-product coke ovens, increase of mining capacity, etc., but nothing definite has been decided.

CLINCHFIELD COAL AT GALVESTON.**Vice-President Evans Writes of the Plans of His Company.**

Vice-President L. S. Evans of the Clinchfield Fuel Co., Spartanburg, S. C., writing regarding the handling of coal at Galveston, Tex., says:

"Mr. Merritt, who has charge of the sale of our coal at Galveston and throughout the surrounding territory, is associated with several other gentlemen in the ownership of large deposits of iron ore of very high grade some distance north of Galveston. A branch line has been built to the ore properties and shipments have been made by vessel from Galveston to Philadelphia. Plans for the best utilization of this ore involve the ultimate construction of furnaces at Galveston, and in connection therewith by-product coke ovens. Mr. Merritt has assembled information and statistics indicating that such an undertaking would have an ample market for successful operation. While these things have been talked of and thought of, they have not been put into concrete shape, and are in the nature of future probabilities. The scheme has had the endorsement of engineers of national reputation, and it has engaged the attention of large financiers.

"We have sent a cargo of Clinchfield coal to Galveston for bunkering steamers. The shipment was made December 5 from Lamberts Point, and two of our fuel engineers accompanied the steamship to watch the performance of Clinchfield coal. The results were satisfactory, and confirm our faith in Clinchfield as a first-class bunker coal.

"We have made some very careful studies of the situation at Galveston, both local and with reference to bunkering vessels. These investigations have encouraged us to begin business, and the development of it will require time and study.

"We are arranging to construct at Savannah the necessary facilities for handling coal from cars direct, or from a storage pile to lighters. This work will require several months, but will be ready for business in time for the autumn movement of cotton. I can give you more information about the character of the Savannah handling facilities a little later on.

"The consummation of our arrangements at Hampton Roads, Savannah and Galveston for supplying bunker coal is a natural result of the growth of our business, which will inevitably lead to entry into all available markets, both foreign and domestic."

The Birmingham Iron Market.

[Special Correspondence Manufacturers Record.]

Birmingham, Ala., January 26.

There has been continued heavy selling of pig-iron during the week. One producing interest reports having sold 50,000 tons, another interest 27,000 tons, another 7500 tons, and special analysis iron to the extent of 2000 tons, making a total of 86,500 tons sold during the past week. This iron was sold for delivery during the entire first half of this year, and the prices obtained were \$10.75 and \$11 per ton at the furnace, No. 2 foundry basis. During the week a press dispatch stated that Birmingham iron was selling in Buffalo at \$10.15 per ton at the furnace, No. 2 foundry basis. With reference to Buffalo's price, Birmingham's equivalent may have been \$10.15 per ton f. o. b. cars Birmingham, but it is quite certain that no Birmingham iron was sold on this basis—that is, standard No. 2 Alabama iron. The total tonnage booked by Birmingham interests during the past two weeks will aggregate 200,000 tons, which is a splendid record. As the bulk of this tonnage was bought by the larger interests, it clearly shows that sufficient business was in hand and in prospect to warrant buyers to take on the large tonnage booked. It is understood that the large pipe company alone booked one order calling for 60,000 tons of pipe for delivery to a New York State municipality. On the whole, while the prices at which the iron has been booked are not "dividend-paying" prices, yet they enable the furnace companies to keep running, thereby insuring their organizations remaining intact until the time arrives when better prices will be realized. Inquiries during the week continued at a very satisfactory rate. Buyers are evidently interested to find out whether or not the bottom has actually been reached. In speaking of a sale of 10,000 tons of iron made three weeks ago on the basis of \$10.50 Bir-

mingham, the manufacturer said that 40,000 additional tons were offered him on the same basis, but was declined for the reason that he had on his books the maximum \$10.50 tonnage. Therefore, not only has the bottom already been reached, but there has been an advance of at least 25 cents per ton. With the putting on the books of the above-referred-to 86,000 tons during the week the producers have stated that they contemplate seeing an established \$11 price before the coming week shall have closed.

The better feeling in the steel market has also been reflected South. The Tennessee Company secured the Southern Railway's order for a substantial rail tonnage the past week. The Gulf States Steel Co. also reports a very satisfactory business in wire products. In fact, its president stated that the company was having trouble filling certain pressing orders on the books.

Following figures approximately represent the Southern pig-iron market per gross ton f. o. b. cars Birmingham:

No. 1 foundry and No. 1 soft, \$11.25 to \$11.50.
No. 2 foundry and No. 2 soft, \$10.75 to \$11.
No. 3 foundry, \$10.25 to \$10.50.
No. 4 foundry, \$10 to \$10.25.
Gray forge, \$9.75 to \$10.25.
Basic, \$10.50 to \$11.
Charcoal iron, \$23.50 to \$24.

The coal and coke market the past week was not as active as has been the case for several weeks past. However, this is mainly due to the fact that the high tension incident to the holidays has been released. Orders on the books got very far behind, and now that there has been a "catch-up" consumers have a good stock on their yards, which will have to be worked off before normal conditions are reached again. Furnace and smelter coke is quoted at \$2.50 to \$2.60 per ton at the ovens, and hand-picked foundry coke at \$3.50 to \$3.75 per ton at the ovens.

The cast-iron pipe market continues fairly satisfactory. While the plants in the districts are running on full time, the officials state that they are only working up the small orders in hand and stocking. Prices are being maintained. Unfortunate for this district, the bulk of the large pipe orders booked are for shipment into territory which is supplied by the Eastern and Western plants of the large pipe company. Following prices are quoted per net ton f. o. b. cars Birmingham: Four-inch, \$22; six-inch and over, \$20, with \$1 per ton extra for gas pipe; fittings, 2½ cents per pound.

Old-iron dealers report a very satisfactory business, with tendency toward larger business the coming week. The demand for good steel scrap and No. 1 machinery scrap are the most active. Following are prices per net ton f. o. b. cars Birmingham:

Old iron axles (small), \$15 to \$15.50.
Old steel axles (light), \$15 to \$15.50.
Old iron rails, \$12.50 to \$13.50.
No. 1 railroad wrought, \$12 to \$12.50.
No. 2 railroad wrought, \$10 to \$10.50.
No. 1 country wrought, \$9.50 to \$10.
No. 2 machinery cast, \$10.50 to \$11.
No. 1 steel scrap, \$10.50 to \$11.
Tram car wheels, \$10.50 to \$11.
Standard car wheels, \$12 to \$12.50.
Light cast and stove plates, \$9 to \$9.50.

The new pipe plant of the Lynchburg Foundry Co. at Anniston, known as the McWayne Pipe Works, was put in commission the past week. This is the second new pipe plant to be put in operation in Anniston within the past three months.

The White Swan Laundry Co. of Birmingham has disclosed its intention of erecting in Birmingham a model \$100,000 laundry. Mr. E. C. Stafford, secretary and treasurer of the company, made the announcement. The building will be of concrete, 100x140 feet, two and a half stories high, with mezzanine floor. A feature of the building will be its equipment of shower baths and lounging-rooms for the female employees.

Kentucky Wood Products Co.

With a minimum daily capacity of about 25 cords of wood, the Kentucky Wood Products Co. expects to begin operating in February its wood distillation plant for the production of wood alcohol, etc. This company was organized with a capital of \$50,000, and has nearly completed its plant at a cost of about \$35,000. Its officers are: President, Wm. Muir; vice-president, John L. Emerson; secretary-treasurer, E. O. Emerson, Jr.; all of Titusville, Pa.; general manager, Kennard Ragon of Quicksand, Ky.; these officers and W. W. Tarbeil of

Philadelphia are the directors. The plant is built, excepting the retorts, to triple initial capacity. It is located at Kragon, postoffice at Quicksand, Breathitt county, about four miles above Jackson, Ky, on the Lexington & Eastern Railway. The steel work was constructed by the Struthers-Wells Company of Warren, Pa., and the copper installations by the Case Manufacturing Co. of Buffalo, N. Y.

Florida West Coast.

If any reader of the MANUFACTURERS RECORD does not want to have aroused in him an intense desire to visit Florida or to settle there it would be well for him to avoid reading a pamphlet just issued by the *Tribune* of Tampa entitled "Semi-Tropic Florida Development Year-Book, 1914." It would be difficult for anyone to even glance through this attractive publication without having his thoughts and desires turn Floridaward.

In this unusually attractive publication of 130 pages, the story of the resources and the attractions in soil and climate and scenery of the West Coast of South Florida is presented more strikingly than in any previous publication that has ever come to our notice. Here is painted the story in picture and in words of the many thriving towns on the West Coast. The beauty of the homes and of the grounds of many of these places, the charm of outdoor life in a region so favored of nature, and the possibilities for success in fruit growing, in diversified agriculture or in other business operations are here fully covered.

The *Tribune* has rendered the whole West Coast, and, indeed, all of Florida, a very great service in issuing such a splendid publication.

An interesting illustration of the spirit of co-operation and friendly relationship that exists among the newspaper people of the West Coast is the fact that the *Tampa Times*, another vigorous daily paper in the same city, gives unstinted editorial praise to the enterprise of the *Tribune* in this work. It is a pity that in every city of the South competitive papers are not always as broadminded as the *Times* in this high praise which it gives to the work of the *Tribune*.

The price of the publication is 25 cents, but we venture to say that every copy issued will be worth \$25 to the State of Florida.

Mine Safety Investigations.

During the few years since the beginning of the mine safety investigations authorized by Congress there has been a marked increase in the general interest taken by miners, mine owners and the general public in all questions relating to safety, according to the forthcoming third annual report of the National Bureau of Mines, Joseph A. Holmes, director; and, in spite of the fact that there has been a considerable increase in the amount of coal mined and in the number of coal miners employed, there has been a marked decrease in the number of fatalities and bodily injuries in mining operations.

It is not claimed that, acting alone, the Bureau of Mines has brought about these changes for the better; nor, indeed, is it claimed that the bureau has been the main factor in bringing about these improvements. The bureau has endeavored to organize and lead in this movement; it has conducted a series of investigations and has disseminated a large amount of information bearing on accident prevention, and in this work it has had the hearty aid and co-operation of the State mine inspectors, mine owners and the miners.

One beneficial result from the work of the bureau is that it encourages research and inspection, the purchase of mine rescue and first-aid equipment, and the maintenance of mine rescue corps by the private mining companies. It is sometimes claimed that investigations and other activities on the part of the National Government discourage similar activities on the part of mining companies. But such has not been the case. On the contrary, the activities of the Bureau of Mines have increased the work of private laboratories and of engineers in private practice or employed by private mining companies, and in the various mining camps where our cars have done training and demonstration work mine rescue and first-aid corps or squads have been organized quite generally among the miners and have been equipped and maintained at the expense of the mine owners.

At the time the bureau first undertook the development of modern protective methods, both as regards

rescue work at mine disasters and recovery work at mine fires, there were in the United States only a few sets of rescue breathing apparatus, and these were in use in the metal mines at Anaconda, Mont. There are now owned and in use by private rescue stations and mining companies several thousand sets of such apparatus, besides auxiliary equipment for fire fighting, in addition to the large number of such apparatus owned by the bureau and widely distributed among its various cars and stations.

The bureau has endeavored to extend the movement for the establishment of rescue stations patterned after its own, at which miners may be locally trained in mine rescue and first-aid work, so that there will be immediately available in times of disaster groups of organized men trained in scientific and rational rescue and recovery methods. There are now in the different parts of the country several hundred such groups of men. A number of the larger mining operators have established rescue stations; at least six own rescue cars equipped somewhat after the manner of those operated by the Bureau of Mines; and the movement has otherwise been vigorously developed not only in the coal-mining, but to some extent in the metal-mining districts.

The next logical step in the organization of this work is now being taken in two mining districts, namely, that of establishing central rescue stations owned and controlled by groups of mine operators. By this plan, instead of each mining company having a few sets of rescue apparatus and a few men trained in the work, a much less individual expenditure establishes a well-equipped corps of professional rescue men at a group of mines. As a result there will be available in time of disaster a nucleus of men who keep in physical condition for the arduous work of mine rescue and who have their apparatus and equipment ever ready for an emergency, as compared with the amateur force now available, who, scattered among different mines, are not able to keep themselves organized and their equipment in the best condition of preparedness.

Gratifying as has been the progress in turning over to the mine owners the local training and rescue operations, there has been no diminution in the demands received by the bureau for its assistance in such work. The rescue force of the bureau is merely supplemented in extending educational work in the various districts and in the training of many thousands of miners now being trained for this work. Its services are now required to an even greater extent than in the past for the training of private rescue-station forces and for inspection and advice concerning the care of their equipment, and for information regarding the latest progress in all lines of rescue and first-aid work.

The mine-rescue and first-aid training has now been under way more than three years, and during this time 31,203 miners have been trained in the use of the necessary equipment and methods. In connection with mine disasters the Bureau of Mines men have been instrumental in rescuing through the use of breathing apparatus 83 miners. A large number of miners have been rescued by others, many of whom were trained or aided in modern rescue methods by the bureau, and a very much larger number of miners have been aided or brought to recovery through the prompt first-aid work of miners trained by the bureau, by the American National Red Cross and by other agencies.

In addition to the actual saving of life, an important part of the work has been the lessening of the suffering of injured miners through the prompt and expert services of the men trained in first-aid work. This work has not only reduced the severity of injuries and kept some men from dying, but it also has enabled miners to resume work much sooner than they could have otherwise. This is a conservation that is difficult to estimate in dollars and cents.

During the year over 46,000 persons (mainly miners) visited the mine rescue safety cars and stations maintained by the bureau, nearly 33,000 miners attended the mine-safety lectures, and more than 5500 miners were given rescue or first-aid training. Miners and operators in all coal fields have taken active interest in the demonstration work of the bureau, and the number of operators who have organized and equipped mine-rescue corps at their own mines at their own expense has shown a most gratifying increase.

The Chamber of Commerce of Lake Charles, La., John B. Kent, secretary, has called a convention for March 3 and 4 at Lake Charles for the purpose of organizing an all-Southern Highway Association.

A Lowland Power Plant.

[Charlotte (N. C.) Observer.]

The prospector for water-power would be inclined to look almost anywhere else than to the sluggishly winding streams through the wooded levels of Bladen county, and yet the *Wilmington Dispatch* says that Salisbury and Concord men who had invested in timber prospects in Bladen have found at the site of an old mill the place for a power that could supply not only Wilmington, but many of the towns in that part of the country. The water is said to have a fall of 10 feet. The lumber company will continue the work of clearing the timber, and in the meantime proposes to take immediate steps for the building of a power dam. When it is demonstrated that a power plant can be operated in the swamps of North Carolina, investors will be likely to view the possibilities of our flat lands in a new light.

\$5,500,000 of Railroad Cars.

One of the most encouraging signs in the business world is the announcement by the Union Pacific Railroad Co. in New York that it has just awarded contracts for the building of 5000 freight cars, which will cost approximately \$5,500,000. There will be 4000 box cars, 600 automobile cars and 400 stock cars. The American Car & Foundry Co. of St. Louis will build 2000 of the box cars and the rest of the equipment will be built by the Pressed Steel Car Co., Pittsburgh. Deliveries are to begin in April.

An Agricultural Train.

In co-operation with the Virginia Department of Agriculture, the Southern Railway Co. will operate in Virginia next month a special agricultural train for lecturers and exhibits which will make 48 stops, beginning at West Point on February 3 and ending at Burke on February 28.

Chattanooga Chamber of Commerce.

The Chamber of Commerce of Chattanooga, Tenn., elected last week Paul J. Kruesi, president; Z. C. Patten, Jr., vice-president; C. C. Nottingham, treasurer, and Frank L. Underwood, Richard Hardy and R. F. Calloway, members of the board of directors.

The Board of Trade of Fort Meade, Fla., is circulating an attractively illustrated pamphlet telling of the advantages and opportunities of the city and its surroundings.



"THE RIGGINS," WACO, TEX.

Hotel under construction for J. W. Riggins; to be opened about May 1; 10 stories; 106x115 feet; reinforced concrete and steel; fireproof; brick and terra-cotta; 208 rooms; 140 bath connections; cost of building, \$350,000; with furnishings and equipment, \$450,000; architects, Lang & Witchell, Dallas, and Roy E. Lane, Waco; contractor, Westlake Construction Co., St. Louis.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Further details of highway undertakings and bond issues mentioned below are given under the headings Construction Department and New Securities, published elsewhere in this issue.]

Bonds Voted.

Alpine, Tex.—Brewster county voted \$85,000 bonds for road construction.
Crowley, La.—Acadia parish authorized \$170,000 bonds for road construction.
Louisburg, N. C.—Louisburg township voted \$40,000 bonds for road construction.
Marshall, N. C.—Madison county issued \$100,000 bonds for road improvements.
Pecos, Tex.—Road District No. 1 of Reeves county voted \$100,000 bonds to construct roads.

Bonds to Be Voted.

Bowling Green, Ky.—Warren county votes March 25 on \$300,000 bonds for road construction.
Bryan, Tex.—City votes April 7 on \$12,000 bonds for street paving.
Clarksville, Tex.—Red River county votes February 21 on \$200,000 bonds to improve roads.
Groesbeck, Tex.—Limestone county will vote on \$150,000 bonds to construct roads.
Marshall, Tex.—Harrison county votes February 24 on \$300,000 bonds to construct macadam or gravel roads.
Wartburg, Tenn.—Morgan county votes March 28 on \$300,000 bonds to construct roads.

Contracts Awarded.

Aberdeen, Miss.—Healy Construction Co., Meridian, received contract to construct 16 miles of roads.
Anniston, Ala.—Calhoun county awarded contract for grading, macadamizing and draining to cost \$6000.
Barrow, Fla.—City awarded contract for bitulithic and other paving, for which \$125,000 is available.
Fort Meade, Fla.—City awarded contract for vitrified brick paving to cost \$30,000.
Meridian, Miss.—Healy Construction Co. has contract to construct macadam and sand-clay roads costing \$200,000.
Montgomery, Ala.—City awarded contract for \$35,000 worth of vitrified brick paving.
Shreveport, La.—Caddo parish awarded contract for 20 miles of gravel road, costing \$100,000.
St. Petersburg, Fla.—City awarded contract for 50,000 square yards of brick laid flat and 70,000 linear feet of granite curb.

Contracts to Be Awarded.

Baltimore, Md.—State Roads Commission opens bids February 10 to construct 19 miles of highway.
Baltimore, Md.—City opens bids February 4 for 22,920 square yards of vitrified brick block paving, 50,300 square yards of sheet asphalt paving, etc.
Corsicana, Tex.—City invites bids on 24,251 square yards of street paving.
De Quincy, La.—City opens bids February 10 for 82,000 square feet of concrete sidewalk and 18,000 linear feet of curb.
Fort Worth, Tex.—City opens bids February 3.
Greenwood, Miss.—Le Flore county opens bids February 2 for improvement of 24 miles of road.
Houston, Tex.—City opens bids January 31 for paving to cost \$9500.
Houston, Tex.—City ordered plans and specifications for paving 35 streets.
Independence, Mo.—Jackson county will invite bids to improve 20 miles of road.
Lufkin, Tex.—City invites bids on 9930 square yards of paving, 3800 linear feet of curb and gutters and 3300 square yards of excavation.
Mobile, Ala.—City will expend \$5000 to pave municipal steel sheds with concrete.
Tulsa, Okla.—City will construct 30,000 square yards of asphalt paving.

Bristol-Memphis Highway.

[Nashville Banner.]

Charles C. Gilbert, secretary Memphis-to-Bristol Highway Association, is in receipt of the following report regarding the work on the trans-State highway from the office of Public Roads, Washington, D. C.:

"Work on the eastern division of the Memphis-to-Bristol Highway from Nashville to Bristol, which was started in January, 1912, was continued during the first part of the fiscal year 1912-13. The funds raised to defray the expenses of an engineer under an arrangement with the office were exhausted in December, 1912, and connection with the work severed.

"Work was done in 10 counties—Cannon, Carter, Cumberland, Greene, Hamblen, Loudon, Roane, Warren, Washington and White. On account of the badly sunken and worn condition of the existing roads, together with the excessive grades, a new location was made on a large portion of the route, particularly on the section crossing the Cumberland Mountains, where the plans call for a new location throughout practically the entire distance of 55 miles.

"All new locations were made permanent, and it was frequently necessary to institute condemnation proceedings before the new rights of way could be secured. The general maximum grade adopted was 5 per cent., but in one or two instances on the mountain sections it was necessary to use a 6 per cent. grade on short stretches. Concrete or stone masonry was used in all the larger drainage structures, while corrugated metal or vitrified clay pipe was used for the smaller drainage areas.

"Preliminary surveys were made on 159.2 miles and final location was established for 88.5 miles. On December 15, 1912, of the total unimproved mileage between Nashville and Bristol—152.3 miles—a total of 52 miles of grade and 17.4 miles of surfacing was finished, while uncompleted contracts and work being done by force account assured a total of 75.5 miles of finished grade and 52.1 miles of surfaced road. The status of the work on a percentage basis was: Unimproved mileage graded, 34.1 per cent.; unimproved mileage surfaced, 11.5; unimproved mileage which will be graded upon completion of contracts, 49.6; unimproved mileage which will be surfaced upon completion of contracts, 34.2 per cent., and unimproved mileage remaining between Nashville and Bristol upon completion of contracts, 21.8 per cent.

"The total quantities, together with the average unit costs of the work done of the 52 miles of grade and 17.4 miles of surfacing finished are as follows: Clearing and grubbing, 76.45 acres, at \$54.13 per acre; earth excavation, 225,513 cubic yards, at \$0.251 per cubic yard; loose rock excavation, 306.8 cubic feet, at \$0.39 per cubic yard; solid rock excavation, 15,215.9 cubic yards, at \$0.812 per cubic yard; overhaul on excavation, 44,446 yard stations, at \$0.01 per yard station; concrete, 686.1 cubic yards, at \$7.94 per cubic yard; masonry, 255.4 cubic yards, at \$6 per cubic yard; slag and gravel, 21,826 cubic yards, at \$0.634 per cubic yard; macadam, 18,332.5 cubic yards, at \$1.47 per cubic yard; 1846 linear feet of 12-inch corrugated metal pipe, at \$0.74 per foot; 1308 linear feet of 15-inch corrugated metal pipe, at \$0.90 per foot; 474 linear feet of 18-inch corrugated metal pipe, at \$1.02 per foot; 832 linear feet of 24-inch corrugated metal pipe, at \$1.48 per foot; 40 linear feet of 36-inch corrugated metal pipe, at \$2.99 per foot; 26 feet of 48-inch corrugated metal pipe, at \$4.29 per foot; 785 linear feet of 12-inch vitrified clay pipe at \$0.58 per foot; 190 linear feet of 15-inch vitrified clay pipe, at \$0.78 per foot; 482 linear feet of 18-inch vitrified clay pipe, at \$0.97 per foot; 97½ linear feet of 20-inch vitrified clay pipe, at \$1.25 per foot; 764 linear feet of 24-inch vitrified clay pipe, at \$1.76 per foot; 39,054 pounds of steel I-beams and rods, at \$0.045 per pound; 9500 feet b. m. of bridge lumber at \$35 per thousand, and crowning and shaping 1,181,800 square yards at \$0.01 per square yard.

"The average earth excavation per mile was 4326 cubic yards, and the average rock excavation per mile was 342 cubic yards.

"The project was strictly a co-operative enterprise, and each county provided the funds necessary to build the section of road within its boundaries. In several counties the funds raised were not available during the year 1912, and no actual construction could be attempted. The progress of the work as a whole would undoubtedly have been much better if the funds in these counties had been available."

Concrete Road Building.

For the purpose of bringing to a focus the present divergent views on the best methods of design and construction of concrete roads, a national conference on concrete road building will be held at Chicago February 12-14, when there will be addresses on "The National Conference on Concrete Road Building," by Dean W. F. M. Goss of the College of Engineering of the University of Illinois, Urbana; on "Financing Permanent Roads," by E. E. Bradt of Springfield, Ill.; on "Can a Rural Community Afford Permanent Roads," by Oliver H. Dunlap of Kalona, Iowa; on "The Concrete Road System of Wayne County, Michigan," by Edward N. Himes of Detroit; on "Development of Concrete Roads in the United States," by Thomas H. McDonald of Ames, Iowa; on "Experiments with Concrete for Roads Conducted by the United States Office of Public Roads," by J. T. Voshell of Washington, D. C., and on "Concrete Road Construction by the Ohio State Highway Department," by James R. Marker of Columbus, O. Reports will be made by committees on contraction and expansion of concrete roads, joints for concrete roads, aggregates for concrete roads, preparation and treatment of subgrade for concrete roads, reinforcement of concrete roads, methods and cost of repairing, shoulders, bituminous surfaces, finishing and curing surfaces, economic methods of handling and hauling materials, mixing and placing materials, cost of construction, thickness, crown and grades, proportion and consistency of materials and form of specifications for concrete roads.

Bids on 64 Miles of Roads.

St. John Road Commissioners, St. Augustine, Fla., are inviting proposals until February 22 for the construction of 64 miles of roads nine feet in width from outside to outside of 4x10-inch concrete curbing. Asphalt macadam, concrete, vitrified brick or other suitable material will be considered. A certified check for \$2000 must accompany each proposal, blank forms for which and other information necessary for bidders can be obtained for a ten-dollar deposit. Address Clerk of Circuit Court W. Wallace Snow, St. Augustine, or A. F. Harley, construction engineer, Jacksonville.

Extensive Road and Street Contracts.

Among the many road and street contracts now progressing in the South are those awarded to the Healy Construction Co. of Meridian, Miss. These are as follows: Twenty miles of gravel road for Caddo parish, Louisiana, the cost being \$100,000 plus the cost of gravel furnished by the county, this including \$20,000 worth of concrete work; 16 miles of macadam road at Aberdeen, Miss.; \$200,000 worth of macadam and sand-clay roads at Meridian, Miss.

Pushing on to Lawton.

Jake L. Hamon, Lawton, Okla., vice-president and general manager of the Oklahoma, New Mexico & Pacific Railway Co., of which John Ringling of New York is president, says it will open bids soon for the construction of an extension from Wilson to Lawton, 80 miles, via Comanche and Walters. The line is now operating westward from Ardmore to Wilson, 20 miles, and several miles of track have been laid beyond that point. The proposed extension will traverse rolling country. Connections will be made with the Rock Island lines at Comanche, Walters and Lawton, and with the Frisco at the latter point. George W. Rider is the chief engineer.

Large Phosphate Elevator.

The Seaboard Air Line is fast completing its large phosphate elevator on Seddon Island at Tampa, Fla., and it will soon be in operation. It is stated that the loading capacity of the new plant will be more than 1000 tons per hour if desired. There are two conveyors with chutes reaching to the hatches of vessels, and there is ample power in reserve so that if one engine should break down another could immediately take its place in operating the machinery. Improvements have also been made to the old elevator.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

IMPORTANT RAILROAD PLAN.**Petersburg & Columbia Springs Line Will Go Through Lumber and Iron Lands.**

Some interesting information about the plans of the Petersburg & Columbia Springs Railway Co., recently chartered in West Virginia to build a line about 120 miles long from Petersburg to Columbia Springs, is contained in a report from Clarksburg, which says that surveys for the road are now complete. It continues as follows:

"The line will begin at Petersburg, on the south fork of the Potomac River, in Grant county, where it will connect with the Baltimore & Ohio, and running southward will follow the valley of North Mill Creek to a point beyond Kline, thence taking up the south branch of the Potomac to Franklin, the county-seat of Pendleton county. From this point the line will pass Jack Mountain, and be built to Monterey, the county-seat of Highland county, Virginia.

"Southeast of Monterey it will cross the Jackson River headwaters, and strike Back Creek, which it will follow southward through Valley Center and Mountain Grove to the Chesapeake & Ohio Railway's Hot Springs division, in Bath county, Virginia, and go thence into West Virginia.

"The new road will tap a region heretofore not opened up by railroad transportation, 75 miles wide and about 100 miles long. On either side of the railroad, almost along its entire length, are mountain knobs rich in iron ores.

"The railroad is primarily for the purpose of transportation to and from virgin forests of timber, considered among the finest hardwood in West Virginia, principally white oak. Interested in the building of the line are the owners of the stock in the Potomac Lumber Co. and the Forest Lumber Co.

"John Y. Hite of Fairmont, W. Va., a moving spirit in the railroad enterprise, is president of the two lumber companies. The Forest Lumber Co. owns 16,000 acres of timber in Pocahontas county and the Potomac Lumber Co. has holdings amounting to 10,700 acres in Hardy and Hampshire counties, tapped by the section of the railroad outlet now constructed from Petersburg to the main line of the Baltimore & Ohio.

"The Potomac company has a large mill at McNeill, and is cutting timber at the rate of about 9,000,000 feet a year. This mill is in Hardy county, near the Hampshire county line."

Besides Mr. Hite, the incorporators of the railroad company are Alex. R. Watson, manager of the Potomac Lumber Co.; Marcus C. Hite, Lloyd Bailey and R. L. Long, all of Fairmont.

\$600,000,000 FOR PENNSYLVANIA.**Stockholders Will Act on Plan to Provide Financing for an Indefinite Period.**

The Pennsylvania Railroad Co. has notified its stockholders that at the annual meeting in Philadelphia on March 10 they will be asked to authorize "a mortgage to secure bonds to be issued from time to time when and as approved by the stockholders to an amount not in excess at any time of the then outstanding capital stock." Thus the company could now issue approximately \$500,000,000 of bonds, as it has that amount of stock outstanding, but as it has been authorized to issue \$600,000,000 of stock, it might sell more shares and thus increase the possible bond issue. When the loan is approved by the shareholders the company will be enabled to offer for sale either bonds or stock as may be most advantageous owing to market conditions. It is intimated that it does not intend to sell any of the proposed bonds immediately.

This formal notice is in line with the announcement made in October last by President Samuel Rea that the Pennsylvania contemplated creating a general mortgage as a basis for its financing, adding that: "Under this mortgage it is contemplated to issue bonds in such amounts from time to time as may be required to provide necessary additions, betterments and improvements

to its railroads, equipment, property and facilities. the funds that may be necessary to meet maturing obligations, and for such other corporate purposes as may now or hereafter be duly authorized by law. The aggregate amount of bonds that may be issued shall not at any time exceed the outstanding capital stock."

After also saying that the question of issuing the bonds would be submitted to the stockholders at the annual meeting, President Rea added that the company "has no expenditures that require immediate financing." He further said that the proposed step was to provide for the future.

\$13,000,000 OF NEW BONDS.

Louisville & Nashville Financing for Extensions and Improvements.

The South & North Alabama Railroad Co., one of the lines in the Louisville & Nashville system, has filed a mortgage to secure \$25,000,000 of 5 per cent. 50-year consolidated bonds in accordance with the decision of the stockholders to increase the debt from \$12,000,000 to \$25,000,000. After setting aside \$12,000,000 for refunding purposes, \$8,757,000 are to be issued immediately, of which \$2,500,000 will be used to purchase additional equipment and the rest to liquidate the floating debt of the road to the Louisville & Nashville Railroad Co., which now exceeds, it is stated, \$4,312,000, any balance remaining to be devoted to paying for additions and betterments now being made and nearly completed. The rest of the bonds are to be issued from time to time as the directors may decide for extensions, betterments and additions. A plan has been adopted for the Louisville & Nashville to purchase the road from its stockholders. The preferred stock is already owned by the larger company.

New Equipment, Etc.

Missouri Pacific-Iron Mountain system has ordered 25 Mikado type locomotives from the Baldwin Locomotive Works, Philadelphia. One of the engines and its tender will weigh 311,900 pounds empty, or about 400,000 pounds when loaded for service. Cylinders 27x30 inches; boiler pressure 170 pounds. They will have Schmidt superheaters, electric headlights and electric lights in the cabs. Tractive power will be over 50,000 pounds. First deliveries under the order are expected about February 15.

Santa Fe has ordered 200 tank cars from the Pressed Steel Car Co., Pittsburgh, in addition to 500 box cars and 300 automobile and furniture cars from the American Car & Foundry Co., St. Louis.

St. Louis Southwestern Railway, says a report from Jefferson City, Mo., has applied to the Missouri Public Service Commission for authority to issue \$340,000 of equipment notes.

Jacksonville Traction Co., Jacksonville, Fla., is reported in the market for 10 street cars.

Richmond, Fredericksburg & Potomac Railway, says a market report, has ordered 2 eight-wheeled switching locomotives from the American Locomotive Co., New York.

Gainesville & Northwestern Railway has ordered a 10-wheeled locomotive from the Baldwin Works.

Wabash Railroad is reported getting prices on a prospective order for 60 locomotives.

Austin Street Railway Co., Austin, Tex., has placed its order for 4 closed street cars with the American Car Co., St. Louis.

Alabama, Florida & Southern Railway has ordered a 10-wheeled locomotive from Baldwin's.

Kanawha & Michigan Railway has ordered 5 steel passenger cars from the American Car & Foundry Co.

Atlanta & West Point Railway is reported to have placed an order for 6 all-steel passenger cars to be delivered next May.

Chesapeake & Ohio Railway, according to a market report, will order 12 Mallet, 10 Mikado and 8 Pacific type locomotives, besides also placing a large contract for cars.

Illinois Central Railroad has ordered 50 more refrigerator cars from the American Car & Foundry Co., making the total order 150 cars.

Corpus Christi Street & Suburban Railway Co., Corpus Christi, Tex., is mentioned as in the market for 2 new single-truck pay-as-you-enter cars to seat about 30 passengers.

Northern Texas Traction Co. is expected to award contract for 20 passenger cars.

Dallas, Tex., Consolidated Electric Street Railway Co. is noted getting prices on an order for 15 cars.

Wellsburg, Bethany & Washington Railway Co., Wellsburg, W. Va., says a report, will purchase a coal car of not more than 20 tons capacity.

Chicago & Alton Report.

The annual report of the Chicago & Alton Railroad, which covers the fiscal year ended June 30, 1913, says that the total operating revenues of the company were \$15,254,864, an increase as compared with 1912 of \$719,142; total operating expenses \$12,840,072, increase \$1,954,871; net operating revenue \$2,414,792, decrease \$1,235,729; operating income after taxes \$1,928,031, decrease \$1,260,834; balance after deficit on outside operations \$1,893,613, decrease \$1,260,681; total income \$1,937,093, decrease \$1,259,059; deficit after total deductions \$1,883,290, increase \$1,579,569.

It is further stated that the deficit was due principally to deferred and special maintenance charges taken up and extraordinary costs of operation due to the physical condition of the property and equipment. With the restoration of the physical property to more nearly normal condition, and the clearing away of liabilities in the way of unsettled claims, it should be possible to handle a larger volume of business in future periods and at relatively less expense, both on account of improved facilities and the fact that the cost would not be unduly inflated by deferred items of liability, together with abnormal maintenance expenditures.

During the year there was expended for additions and betterments \$909,895.

There was an increase of nearly 6½ per cent. in total freight revenue, and there was also an increase in the average revenue per ton. Revenue per ton per mile decreased owing to the longer average distance hauled per revenue ton. Passenger revenue increased more than 2¼ per cent.

Tuscaloosa Improvement Work.

The Birmingham-Tuscaloosa Railway & Utilities Co. has issued \$600,000 of 6 per cent. three-year notes, the proceeds of which are to be used to electrify, newly equip and extend the existing Tuscaloosa Belt Railway, now operated with steam; to construct a modern power plant at Tuscaloosa which will provide power for the railway and also supply electricity for light and power throughout the city and suburbs, and to complete the laying of gas mains in the same city and build the remainder of the gas-distributing system, which will make the city system proper have 14 miles of gas mains. When the railroad is extended to accommodate the public because of the rapid growth of Tuscaloosa and its suburbs, there will be about 18 miles of track newly ballasted, electrified and equipped. At present there are 14 miles of railway, the franchise for which is perpetual.

Railroad Notes.

The St. Louis Southwestern Railway Co. and allied companies announce the removal of their general offices to the seventeenth floor of the Railway Exchange Building at St. Louis. This includes the Southern Illinois & Missouri Bridge Co.

The Republic Railway & Light Co. reports gross earnings for December \$282,300.92, increase as compared with the corresponding month of 1912, \$17,739.78; net earnings \$105,452.59, increase \$5674.24; surplus \$62,153.40, increase \$6459.90. For the year ended December 31 the gross earnings were \$2,997,669.66, increase as compared with 1912, \$342,067.76; net earnings \$1,153,705.85, increase \$108,675.13; surplus \$617,441.60, increase \$101,345.82.

Walter Sharp and William T. Anderson of the Board of Trade and Business Men's Association of Norfolk, and Frank S. Hope and I. T. Van Patten of the Business Men's Association of Portsmouth, are members of a joint committee which is circulating a folder dealing with factors emphasizing the importance of the Norfolk and Portsmouth Navy-yard as a logical location for a new drydock for the Government.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Erlanger Cotton Mills.

Cotton cloth for men's underwear will soon be issuing from the looms of the Erlanger Cotton Mills, Lexington, N. C. This plant is being equipped with 25,600 spindles and 580 looms, to be increased to 41,000 spindles with 1080 looms. It represents an initial investment of approximately \$500,000 by Erlanger Bros. of New York and Baltimore and George W. Montcastle of Lexington. The entire plant and equipment may be briefly summarized as follows:

Two-story 275-foot spinning mill with one-story 387-foot weaving department, both being 132 feet wide; spinning and weaving machinery set on wooden floors laid on tar concrete; second floor of two-story section, for carding machinery, of reinforced concrete construction; roofs of standard mill construction, with monitors; power plant, comprising boiler and turbine rooms, built adjacent to mill near the center; cotton warehouse, one compartment having the opener-room; platforms and outside stairs of main building and warehouse of reinforced concrete construction. Three self-feeding openers, three 40-inch beater breakers, three 40-inch finishers, suction fan and condenser in picker-room; each picker driven by individual motor belted direct to beater shaft; cardroom machinery driven by group motors and shafting; each spinning-frame driven by individual motor, 7½ horse-power for warp and 5 horse-power for filling frames; these motors directly connected with cylinders. Each spooler and twister driven by individual motors, three-quarters horse-power for spoolers and one-half horse-power for twistors; each machine gear-driven; slashers, warpers and clothroom machinery are group driven, each loom driven by a one-third horse-power motor; four boilers of 250 horse-power each; 1500-kilowatt steam turbo-generator; 15-kilowatt steam turbo-exciter set and 14-kilowatt motor generator exciter set; air conditioning system of 68 high-duty motor-driven heads; 75,000-gallon tank and 1000 gallons per minute steam fire pump for fire protection; 60 Watt lamps and intensive steel reflectors for lighting all departments. Seventy operatives' cottages furnished with electric lighting, water supply and sewer system. J. E. Sirrine of Greenville, S. C., furnished plans and specifications for this entire plant, besides supervising the construction, and the machinery contractors included the following: General Electric Co., Schenectady, N. Y., for electrical apparatus, including power-plant equipment, motors, etc.; Howard & Bullough American Machine Co., Pawtucket, R. I., for spinning and preparatory machinery; Stafford Company, Readville, Mass., for looms.

Connelly Springs Hosiery Mill.

The Connelly Springs (N. C.) Kitting Mill Co., previously noted incorporated, has a daily capacity of 250 dozen pairs of hosiery. Its plant includes \$4000 brick building, 124x34 feet; 60 knitters, 15 ribbers, 16 loopers, 2 hemming machines, dyeing department, finishing machinery; this equipment cost about \$8000; using steam power. In about 60 days the company will begin the construction of a hydro-electric plant and transmission system, costing about \$6000 to complete, on South Fork River, four miles distant. D. B. Mull, president, secretary and treasurer; W. T. McGalliard, vice-president.

The Cotton Movement.

In his report for January 23 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 145 days of the present season was 11,140,754 bales, an increase over the same period last year of 475,701 bales. The exports were 5,909,658 bales, a decrease of 142,837

bales. The takings were, by Northern spinners, 1,626,911 bales, a decrease of 98,137 bales; by Southern spinners, 1,946,521 bales, an increase of 329,647 bales.

Addition to Patterson Mill.

The Patterson Manufacturing Co. of Kannapolis, N. C., will build an additional mill to be equipped with spinning machinery. This new building will be a two-story structure, 200 feet long by 85 feet wide. At present the company is operating an equipment of 21,120 ring spindles, 400 broad looms, etc., by electric power, employing 225 operatives on the production of brown shirtings.

A. F. Nagel Embroidery Works.

In accordance with plans heretofore announced, the A. F. Nagel Embroidery Works has been established at 1605 N. Euclid avenue, St. Louis. This enterprise includes a \$3000 brick building, 75 feet long by 25 feet wide, equipped with two 10-yard embroidery machines, electrical drive and other machinery costing about \$7000, with a capacity of 24,000 stitches in 10 hours.

Quitman Manufacturing Co.

The Quitman (Ga.) Manufacturing Co. is being organized, with a capital stock of \$100,000, to acquire the Atlantic & Gulf Mills, containing an equipment of 10,000 ring spindles, 2500 twister spindles, etc., for the production of cotton yarn. S. M. Turner, S. S. Rountree, E. J. Young, G. M. Spain and their associates are the organizers.

Central Power Plant for Spray.

Marshall Field & Co., Chicago, have engaged Frank P. Sheldon & Son, Providence, R. I., to prepare plans and specifications for constructing a central power plant at Spray, N. C., to supply the Spray cotton mills controlled by Field & Co. They were recently reported as to build this plant at a cost of \$150,000.

The Picket Cotton Mills, High Point, N. C., is considering the installation of 30,000 or 36,000 additional spindles, and will decide within the next few months. This company was previously reported as to add these spindles. It has 12,000 spindles, 300 looms, etc.

To Add 5000 Spindles.

The Cora Cotton Mills, Kings Mountain, N. C., will add 5000 spindles, carding machinery, etc., as lately reported. This equipment has been ordered, and is expected to be in operation by April 1. At present the company has 10,560 ring spindles, etc.

A \$300,000 Capital Increase.

The Alden Mills, New Orleans, has increased capital stock from \$200,000 to \$500,000. This company operates 5000 mule spindles, 300 knitting machines, dyeing and finishing equipment, etc., on the production of hosiery.

A \$50,000 Knitting Mill.

Capitalized at \$50,000, the Louise Knitting Mill of East Durham, N. C., has been incorporated by J. H. Stone, W. T. Cole, T. H. Allison, J. K. Mason and others.

Textile Notes.

J. M. Newton, Graham, Va., is corresponding relative to the location of a woolen mill at Graham.

The International Woolen Mills Co., Parkersburg, W. Va., has been incorporated with a capital stock of \$5000 by Geo. W. Strong, Jas. A. Ryan and associates.

The French Broad Manufacturing Co., Asheville, N. C., contemplates installing eight looms, but has not per-

feeted plans. It was mentioned last week as having ordered eight looms and contemplating 52 additional.

Oscar Herman of Cleveland, O.; Hugh G. Kyle and others of Rogersville, Tenn., plan the organization of a \$50,000 company to establish a hosiery knitting mill at Rogersville. This enterprise was recently noted.

The Central Falls (N. C.) Mills has been incorporated with a capital stock of \$100,000 by H. L. Caveness and J. M. Caveness of Cole Ridge, N. C., J. B. Stroud of Greensboro and associates, to acquire the Worth Manufacturing Co. properties.

F. H. Mead has purchased the Littleton Hosiery Mills, Littleton, N. C., and now has this \$30,000 plant in operation. About 100 operatives are employed, and the daily capacity is 500 dozen pairs of hosiery. The equipment includes 100 knitting machines.

The Wesson Operating Co., Wesson, Miss., has been incorporated to acquire the Mississippi Mills equipped for manufacturing cotton and woolen goods. Its officers are: S. Cdenheimer, president; I. Marx, vice-president; John H. Hickey, secretary; E. Marx, treasurer; all of New Orleans.

MINING

Main Island Creek Coal Co.

The Main Island Creek Coal Co., Charleston, W. Va., has reorganized with a capitalization of \$500,000 and is proceeding with its proposed developments in Logan county, West Virginia. It is opening ten mines, and will open four additional mines upon completion of a 10-mile railway which will be constructed to connect with the Chesapeake & Ohio Railway. Contracts have been awarded for the construction of three power plants of 400 horse-power each, 500 houses, various other buildings, etc. Officers elected are as follows: President, John Laing of Charleston; first vice-president, J. F. Johnson of Welch, W. Va.; second vice-president, James Stirratt of Stanford, W. Va.; secretary-treasurer, O. O. Cooper of Hinton, W. Va.

Daily Capacity 1000 Tons of Coal.

A daily capacity of 1000 tons of coal is proposed by the Modoc Coal Mining Co., of which W. H. Thomas of Bramwell, W. Va., is president. This company has incorporated with \$100,000 capital stock and will develop 1500 acres of coal land. Its machinery will include electric motors, and J. J. Huddleson, manager, Algoma, W. Va., wants prices on tippie machinery, mine cars, finished lumber, cement, brick, doors, frames and windows. Eugene Powell of Crystal, W. Va., is the company's construction engineer.

To Develop Western Kentucky Mines.

The Deepwater Coal & Coke Co., H. F. Allen, president, Henderson, Ky., has purchased 18 coal mines in Western Kentucky, and it is reported the price exceeds \$1,000,000. It will develop the property, and plans to construct branch railways through the mining district to Henderson, where it will load coal on boats for towing to New Orleans.

Pineville Coal Co.

The Pineville Coal Co., Pineville, Ky., has purchased 1346 acres of coal land on Straight Creek, and will develop the property for a daily capacity of 1500 tons of coal, expecting to expend \$100,000. Its plant will be equipped with retarding conveyors, shaker screens, electrical machinery, etc., and the company will probably be ready for machinery bids about March 15.

To Mine Mica in Virginia.

For the purpose of developing a Virginia mica property, the Virginia Mica & Mining Corporation of Chula, Va., has been chartered with a capital of \$10,000 and the following officers: President, George H. Matchett; secretary, L. B. Kinzer; both of Philadelphia, Pa.

MECHANICAL

Illustrations and descriptions having news value pertaining to developments in machinery, mechanical devices and inventions will be considered for use in this department.

Ornamental Street Lamps.

A series of arc and incandescent lampposts and lighting standards for use by central stations and municipalities throughout the country has been developed by the Central Foundry Co., 90 West street, New York, and many installations have already been made in the East.

One type of the lamppost and cluster is shown in the accompanying illustration. The experience of the com-



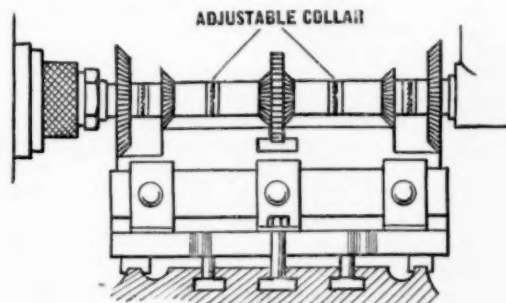
A CENTRAL FOUNDRY CO. LAMP-POST.

pany in manufacturing Universal pipe, entailing the machining of the pipe ends, and experience with other important features in producing solid castings of this kind have been availed of by the company in producing its lampposts. The company's foundries, warehouses and branch offices are located in various cities throughout the United States, so that satisfactory co-operation is available.

Adjustable Spacing Collar.

A new form of spacing collar, designed primarily for use in milling machine manufacturing operations where two or more milling cutters on the same arbor must be spaced exact distances apart, is shown in the accompanying illustrations. It is known as the "Wear-Ever" adjustable spacing collar.

In straddle or gang milling machine operations it is



LOCATION OF SPACING COLLAR IN MACHINE.

sometimes necessary to grind the sides of the teeth of the milling cutters. This changes the distance between the faces of the milling cutters, and in order to maintain sizes on the piece being manufactured, compensation must be made for the amount ground off the cutter. This is sometimes accomplished by carrying in stock

an assorted lot of solid space collars of various lengths, and if the exact size cannot be found provision must be made by grinding off a solid collar that is too long, or shimming up one that is too short, during which time the milling machine is standing idle. By the use of the "Wear-Ever" collar, thicknesses may be varied a total of .024 inch. This is divided into 12 spaces of .002 inch each. The adjustment of the collar is quickly made, and after the adjustment it performs the function of a solid collar.

It is stated that this collar is now in use in some of



DETAILS OF SPACING COLLAR.

the larger automobile manufacturing plants; that it is economical in cost, and that wide use of the collar in machine shops is permissible at a small investment.

Scully-Jones & Co., Railway Exchange Building, Chicago, Ill., dealers in complete foundry equipment, machinist supplies and railway appliances, are putting the "Wear-Ever" collar on the market.

Uniform Specifications for Horizontal Tubular Boilers.

An important step in advance has been effected in the work of bringing about a more uniform system of carrying on the various structural details in the manufacture of horizontal tubular boilers by the recent unanimous concurrence of the members of the National Association of Tubular Boiler Manufacturers in a set of resolutions in which each item was considered separately. The meeting was held in Pittsburgh, with President C. V. Kellogg of Chicago and a number of State, municipal and insurance inspectors, officers of leading boiler manufacturing companies and others present.

The meeting was addressed by President Kellogg and Thomas E. Durban of Erie, Pa., following which the discussion on each point brought up was held, and when complete, unanimous decisions were rendered by the vote in every case.

The subject of obtaining more uniform rules or laws for carrying out the various features of boiler-making has been discussed for many years, but with only partially effective results. The association, encouraged by the unanimity of opinion as brought out at the Pittsburgh meeting, will continue its efforts to obtain general recognition of the importance of the subject and to induce the various lawmaking bodies to enact rules and regulations which will give practical effect to the recommendations of the manufacturers, inspectors, insurance representatives, etc.

As the Massachusetts laws had been in existence longer than any others, and had been found to be efficient, they were taken as the basis of the arguments. The Massachusetts laws are mainly concurred in by the Ohio laws, the Chicago rules, the Detroit rules and the Memphis rules, and as they were pioneers in this class of legislation from a State viewpoint, it was assumed that those laws might well be the basis for concurrent legislation throughout the United States.

A condensed statement of the conclusions as expressed in resolutions unanimously adopted by the meeting included the following: The factor of safety of five to be used in all boiler construction. Fusible plugs to be used in all boilers. All rivet holes to be reamed; plates up to and including 5-16 inch to be reamed $\frac{1}{8}$ inch; from 5-16 inch to $\frac{1}{2}$ inch, inclusive, $\frac{1}{4}$ inch; above $\frac{1}{2}$ inch drilled from the solid; tube holes to be cut from the solid or punched $\frac{1}{2}$ inch small, and reamed to size; the pitch of diagonal braces to be the pitch of staybolts, plus 2 inches to be the allowable pitch for diagonal braces in a boiler, pitch to be taken from center to center of rivets; through rods to be pitched the same as diagonal braces; when boiler has a manhole, the front head or rear head can be braced with crowfoot braces, and can be triangular if properly distributed, but the bridge type of brace for rear head is preferred; longitudinal seams of shell to be butt strapped in all cases except boilers under 36 inches in diameter, not exceeding 100 pounds working pressure; thickness of butt straps as recommended by Massachusetts Board of

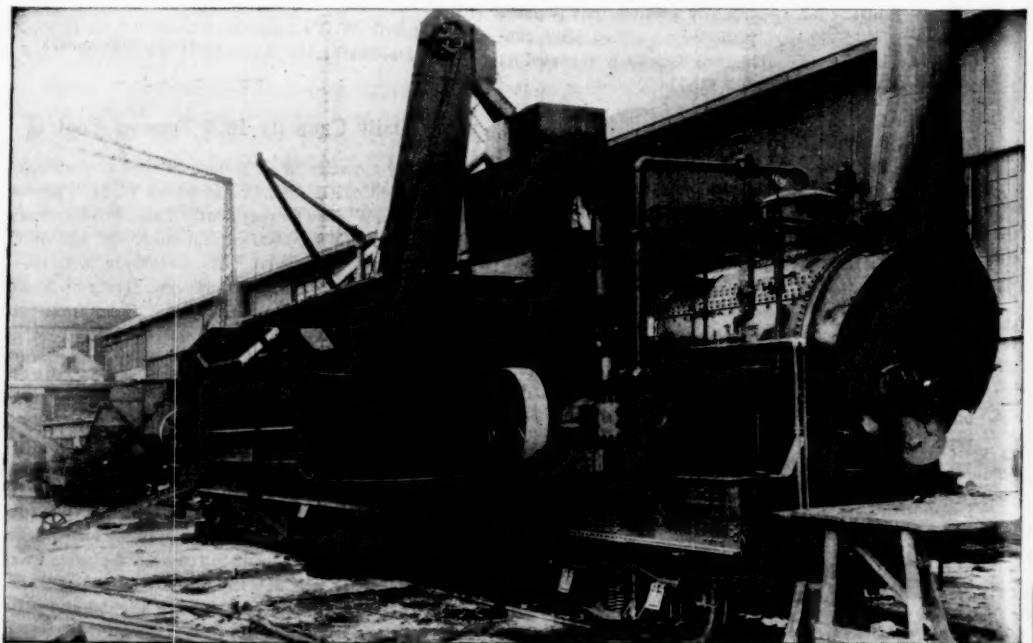
Boiler Rules. Manholes and handholes: Boilers 40 inches in diameter shall have a manhole above the tubes; boilers 48 inches and larger in diameter shall have two manholes, one above and one below the tubes; all boilers that do not have a manhole shall have a handhole in the front head. Perforated dry pipes to be prohibited; the slotted or channel dry pipe to take its place. Boilers above 72 inches in diameter shall have galloways frame suspension; 72 inches diameter and less shall be supported by brackets. Internal feed pipes as per Massachusetts laws. All plates to be beveled on a regular plate planer where possible, and no process to be used in beveling plate that causes distortion at the edge. Inspectors to be authorized to replace obliterated stamps. Blow-off tanks to be made of boiler plate to stand boiler pressure, with two flanges for inlet and outlet; outlet to be equivalent to twice the diameter of the blow-off inlet. Fitting of butt straps per Massachusetts law. Minimum size of water column pipe, $1\frac{1}{2}$ inches.

The minutes of the meeting, in which the proceedings are given in detail, may be obtained by addressing Mr. Durban.

Cummer One-Car Portable Paving Plant.

The extensive use of asphalt in paving and road building in various parts of the country which requires the use of heating and mixing machinery, etc., calls for wide lines of machinery adapted to the purpose. In order to assemble the various equipment necessary for a complete asphalt plant, the F. D. Cummer & Son Company of Cleveland, O., manufactures the Cummer one-car asphalt plant shown in the accompanying illustration. This car is 65 feet over all, and will travel over standard-gauge roads.

New improvements are added to this equipment as found practicable, but it is stated that in the past year no complaints or suggestions have been made, so that the 1914 car is a duplicate of that made in 1913. It is built with steam or direct heat equipment for melting the asphalt. The manufacturer claims that it has an easy capacity for turning out sufficient asphalt mixture



CUMMER ONE-CAR PORTABLE ASPHALT PAVING OUTFIT.

to lay 2000 square yards of two-inch topping per day of 10 hours, or the equivalent in asphaltic concrete, Topoka specification or binder. It is so arranged that it can be changed from one class of pavement to another with a minimum of delay. The mineral aggregates, as well as the asphalt, are accurately weighed, so that they will form the proper mixture in the mixing machine.

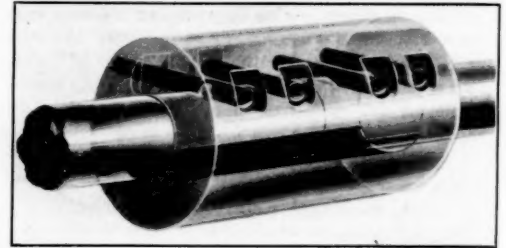
The company has been building asphalt plants for the past 15 years, and has had a one-car plant on the market for about eight years. It is stated that they are extensively used by contractors and municipalities throughout the United States and Canada.

Thomas Patent Little Giant Shaft Coupling.

The coupling shown in the illustration, which has been designed and patented with a view to being adaptable for connecting shafts of all sizes and to withstand

the most severe service, is manufactured by the Thomas Coupling Co. of Warren, Pa. It is known as the Thomas patent "Little Giant" shaft coupling, having the qualities of safety, self-keying, self-seating, self-fitting and self-aligning. It is built in two different types, one suited to shafts from 1 3-16 inches to 2 15-16 inches, and the other with additional pins for larger sizes.

Its construction consists of a cylindrical iron or steel



NEW PATENT SHAFT COUPLING.

casting through which a hole is bored lengthwise, in which the two ends of shafts which are to be coupled are received. A clearance space is milled lengthwise through the bore, as shown at the lower side of the shaft, which keeps it free from the bottom of the coupling. This allows the bearing faces to be forced against the shaft with all the strain of the twist on the shaft against the pins, producing a wedging action which increases with the horse-power being transmitted by the shaft, so that the hold increases to meet any strain placed upon the shaft.

At the side of the coupling the keyholes as shown are accurately laid out and drilled transversely to the bore, entering a portion of the bore of the coupling. In these holes, specially treated, cupped end, tool steel pins are driven by means of an ordinary hammer. On account of tool steel being used the portion of the shaft in the way of the pin is cut out, thus locking the shaft both ways and eliminating the machine operation of key-seating of the shafting. It is apparent that accu-

rate alignment is thus effected. The entire absence of set screws, bolt heads, nuts and other projections that would be liable to catch clothing of the workers is noteworthy, since it adds greatly to the safety qualities of the coupling.

Among the claims for its advantages are that it is powerful in its grip, powerful in its drive, and simple in its mechanical construction. Its grip is due to the manner in which the pins cut their way through the surface of the shaft, tightly embedding themselves in place. This leaves no sharp edges on either the shaft or pins, thus removing any tendency of shearing or working lengthwise on the shaft. Its strength is clearly indicated in the illustration.

It is estimated that the strawberry crop of Tangipahoa parish, Louisiana, which will soon begin to move to market, will be worth \$5,000,000.

Construction Department

IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$25 per year.

All advertising contracts in the Manufacturers Record for three months or longer include a subscription to the Daily Bulletin for the contract period, as well as a subscription to the Manufacturers Record.

BRIDGES, CULVERTS, VIADUCTS

Fla., Arcadia.—DeSoto county voted \$200,000 bonds for bridges and roads; V. W. Surrency, Chrmn. Board. (See Road and Street Work.)

Fla., Jacksonville.—Duval County Comms. contemplate construction of bridge across St. Johns River; possibly 350x40 ft.

Fla., Jacksonville.—Atlantic Coast Line R. R., E. B. Pleasant, Ch. Engr., Wilmington, N. C., petitioned Government for authority to construct bridge across Trout Creek; length, 2000 ft.; 60-ft. draw between fenders; 18 ft. above high water under draw when closed. (Lately noted.)

Ga., Vidalia.—Altamaha Bridge Co., J. L. Whatley, representative, plans construction of bridge across Altamaha River near Vidalia to cost about \$65,000.

Ky., Louisville.—War Dept., Washington, D. C., approved plans and specifications of C. E. Buskirk, Mattewan, W. Va., for bridge over Tug Fork of Big Sandy River.

Md., Easton.—Talbot County Comms., Jos. B. Harrington, Clerk, will construct 2 concrete bridges along Peachblossom Rd.; 500 ft. and 300 ft. long; concrete or protected wood pile foundation; bids until Feb. 17; blank forms of proposals at office of State Roads Com., Garrett Bldg., Baltimore. (See Machinery Wanted.)

Mo., Ava.—Kansas City, Ozarks & Southern Ry., Jno. W. Byng, Gen. Mgr., Ava, states is rebuilding all bridges with concrete foundations and new timbers.

Mo., Kansas City.—E. S. Hahn, Deputy County Surveyor, completed plans for concrete bridge to replace structure across Blue River on Red Bridge Rd.; cost \$15,000.

N. C., Danbury.—Stokes County Comms. let contract R. R. King at \$5300 to construct 5 bridges across creeks in Danbury and Sauratown townships.

N. C., Greensboro.—Greensboro, Northern & Atlantic Ry. Co., W. Washabaugh, Ch. Engr., will build 8 or 10 steel bridges.

N. C., Wentworth.—Rockingham County Comms. are having plans prepared by J. N. Ambler of Winston-Salem for steel bridge to be constructed across Dan River between Reidsville and Draper; length 548 ft.

Tex., Amarillo.—Texas, Kansas & Omaha Ry. Co., F. T. Burnham, Prest., Dwight

Bldg., Kansas City, Mo., will build 1500-ft. bridge across Canadian River.

Tex., Angleton.—Brazoria County Comms. will repair bridge recently damaged by flood; bids until March 2; bidders must go upon ground, make examination and soundings, furnish plans and specifications; J. W. Munson, County Judge. (See Machinery Wanted.)

Tex., Carthage.—Panola County Comms. ordered construction of iron bridges over small streams costing \$7000, and iron bridge costing \$7000 across Sabine River at Grand Bluff.

Tex., Christoval.—Tom Green county let contract to El Paso Bridge & Iron Co., El Paso, Tex., to construct \$6000 140-ft. steel span bridge lately noted; Engrs., B. F. & C. M. Davis, Reynolds Bldg., Fort Worth.

Tex., Dallas.—Dallas county voted \$75,000 bonds to pave Dallas-Oak Cliff viaduct and \$50,000 to construct 3 additional bridges Trinity River. Address County Comms. (Lately noted.)

Va., Culpeper.—Culpeper County Comms., W. E. Coons, Clerk, and Orange County Comms. contemplate constructing steel bridge across Rapidan River, near Tobacco Stick Ford, between the two counties.

CANNING AND PACKING PLANTS

Va., Front Royal.—Old Virginia Orchard Co. will double capital stock and increase equipment. (See Machinery Wanted.)

CLAYWORKING PLANTS

Ala., Birmingham.—Bricks.—Sibley Brick Co., capital stock \$150,000, inceptd.; Crawford Johnson, Prest.; J. H. Eddy, V.-P.; W. F. Gorman, Secy.-Treas.

Ky., Lebanon.—Brick and Tile.—Lebanon Brick & Tile Co., capital \$5000, inceptd. by T. M. Estes, Robert L. Goodin and Lee Goodin.

Mo., Webb City.—Pottery.—D. S. Young of St. Louis submitted proposition to Commercial Club to organize company to establish pottery.

N. C., Spencer Mountain (not a post-office).—Bricks.—Spencer Mountain Stone & Brick Co. will rebuild brick plant burned at estimated loss of \$20,000; offices in Charlotte.

Tex., Jourdan.—Jourdan Brick & Tile Co., capital stock \$10,000, inceptd. by E. Danel, W. H. Hill and H. G. Burkhalter.

COAL MINES AND COKE OVENS

Ky., Barbourville.—Hazard Town Coal Co., capital \$30,000, inceptd. by W. M. Jones, O. C. McClung and J. B. Eversole.

Ky., Cornettsville.—Garrett-Hardwick Coal Co. organized to develop 2500 acres coal land.

Ky., Coxton.—Harlan Coal Mining Co., Louisville; Ky., let contract to Roberts & Schaffer Co., McCormick Bldg., Chicago, at \$25,000 for Marcus coal tippie and retarding conveyor from mine.

Ky., Henderson.—Deepwater Coal & Coke Co., H. F. Allen, Prest., purchased 18 Western Kentucky coal mines, exceeding \$1,000,000 being reported price; will develop; construct branch railways through mining district to Henderson and there load boats for towing to New Orleans.

Ky., Louisville.—Glass-Well's Coal Co., capital stock \$10,000, inceptd. by J. L. Wells, C. D. Glass and A. J. Bence.

Ky., Louisville.—Glass-Well's Coal Co., capital \$10,000, inceptd. by J. L. Wells, C. D. Glass and A. J. Bence.

Ky., Pineville.—Pineville Coal Co. purchased 1346 acres coal land on Straight Creek; will develop for daily capacity 1500 tons; expect to expend \$100,000; equip plant with retarding conveyors, shaker screens, electrical machinery, etc. (See Machinery Wanted.)

Ky., Providence.—Washington Coal & Coke Co., capital \$3000, inceptd. by Henderson Foxwell, James A. Foxwell and Hey Foxwell.

Ky., Winchester.—Wolf Valley Coal Co. is reported to have purchased 1270 acres in Breathitt county.

Mo., Rich Hill.—Perry-McMahan Coal Co., capital \$4000, inceptd. by W. C. Perry, E. O. McMahan and G. H. Payne.

Tenn., Chattanooga.—Chattanooga Iron & Coal Corp., C. E. Buck, Prest., contemplates improvements to cost about \$1,000,000, including construction by-product coke ovens, increase mining capacity, etc.; nothing definite decided.

Tenn., Chattanooga.—Tennessee River Coal & Coke Co., capital \$125,000, inceptd. by J. T. Gillespie, S. C. Tarver, J. T. Walker and others.

Tex., Galveston.—Atlantic States Coal & Coke Co. (subsidiary to Clinchfield Fuel Co., Spartanburg, S. C.), Wesley Merritt, representative, has plans involving ultimate construction of by-product coke ovens in connection with iron furnaces; general offices, Richmond, Va.

Va., Pennington Gap.—Virginia Iron, Coal & Coke Co. is reported to install additional mining machinery at its Imperial plant; offices at Roanoke.

W. Va., Kanawha County.—Safe Deposit & Trust Co., Pittsburgh, Pa., purchased 14,386 acres land in Kanawha and Boone counties; reported purchase price, \$124,000.

W. Va., Lewiston.—Lewiston Block Coal Co., capital \$25,000, inceptd. by Asa A. Scarbeury, W. E. Chandler, L. J. Schwartz and others.

W. Va., Logan.—Main Island Creek Coal Co. reorganized with \$500,000 capital stock; John Laing, Prest., Charleston, W. Va.; J. F. Johnson, 1st V.-P., Welch, W. Va.; James Stirratt, 2d V.-P., Stanford, W. Va.; O. O. Cooper, Secy.-Treas., Hinton, W. Va.; develop Logan county coal field; opening 19 mi.; let contracts for construction 3 power plants 400 H. P. each, 500 houses, 2 stores, etc.; will construct 2 mi. railway connecting with Chesapeake & Ohio Ry., and upon completion open 4 additional mines. (Previously noted.)

W. Va., Olcott.—Paint Creek Collieries Co., Charleston, W. Va., and Scranton, Pa., let contract to Roberts & Schaffer Co., McCormick Bldg., Chicago, to build coal-mining plant, including installation of Marcus patent picking table screen; cost about \$27,000.

W. Va., Villa.—Mill Creek Cannel Mining Co., Charleston, W. Va., inceptd., capital \$10,000; I. C. Goff, Prest.; F. M. Wattle, V.-P. and Mgr.; J. F. Hindson, Secy.; W. B. Taylor, Treas.; develop 1476 acres; daily capacity, 200 tons. (See Machinery Wanted.)

W. Va., Springtown.—Modoc Coal Mining Co., W. H. Thomas, Prest., Bramwell, W. Va. (lately noted inceptd., capital stock \$100,000), will develop 1500 acres; daily capacity 1000 tons; Eugene Powell, Crystal, W. Va., construction engr.; install machinery, including electric motors, etc.; machinery proposals, address J. J. Huddleson, Mgr., Aigoma, W. Va. (See Machinery Wanted.)

CONCRETE AND CEMENT PLANTS

Fla., Avon Park.—Concrete Blocks, etc.—Jas. Sage and Bud Ellis of St. Cloud, Fla., and W. A. Bailey, St. Joseph, Mo., organized company to mfr. concrete in all its forms and erect concrete dwellings; Mr. Sage and others are now located in Avonia Apartments, Avon Park.

COTTON COMPRESSES AND GINS

Ark., Lake City.—J. L. Nichols Co., capital \$10,000, inceptd.; J. H. Carter, Prest.

S. C., Walhalla.—C. W. Pitchford, Walhalla, and Neville Bros., West Union, S. C., will build four 80-saw cotton gin. (Previously noted.)

S. C., West Union.—Neville Bros., West Union, and C. W. Pitchford, Walhalla, will build four 80-saw cotton gin. (See S. C., Walhalla.)

Tex., Robstown.—Robstown Gin Co. will build ice plant; unit system; daily capacity 10 tons; cost \$10,000.

COTTONSEED-OIL MILLS

S. C., Yorkville.—Yorkville Cotton Oil Co., capital \$40,000, inceptd. J. S. Mackorell, Prest.; W. H. Fowler, Secy.-Treas.

S. C., Walhalla.—C. W. Pitchford, Walhalla, and Neville Bros., West Union, secured 278x230-ft. site for 10-ton cottonseed-oil mill and four 80-saw cotton gin; also duplicate this gin at West Union. (Previously noted.)

DRAINAGE SYSTEMS

N. C., Wilmington.—New Hanover County Drainage Dist. No. 1 engaged J. L. Becton, Civil Engr., 27 I. O. O. F. Bldg., Wilmington, to make surveys for draining 2500 acres of flat bay or savanna land, 2 mi. east of Wilmington, for health, agricultural and development purposes; final survey just begun; propose constructing 15 mi. ditches not over 4x5 ft.; no pumping plant. (Lately noted.)

ELECTRIC PLANTS

Ark., Russellville.—Seven Cities Co., capital stock \$250,000, inceptd.; Henri Chouteau, Prest.; D. B. Niederlander, V.-P.; A. E. Hecker, Secy.-Treas. (Lately noted organized to buy public service corporations at Russellville, Morrilton, Cabin Creek, Dover, Springdale, Fayetteville, Rogers and Bentonville.)

D. C., Washington.—Potomac Electric Co. will remodel power plant at 14th and B Sts. N. W.; cost \$2500.

Fla., Arlington Heights.—C. C. Tracey, 311 Masonic Temple, Jacksonville, let contract J. F. Zetsche, Jacksonville, to construct electric-light plant and water-works. (Lately noted.)

Fla., Melbourne.—Town will vote in Feb. on \$5000 bonds to construct electric-light system. Address Town Clerk.

Ga., Eastman.—Eastman Light & Ice Co., W. E. Davison, Mgr., will install electrical machinery. (See Ice and Cold-storage plants and Machinery Wanted.)

Ky., Jefferson.—City contemplates constructing street-lighting system; will soon invite bids; Dr. D. A. Floore, Chrmn., Trustees.

Ky., Jenkins.—Consolidation Coal Co. of Fairmont, W. Va., and Continental Trust Bldg., Baltimore, Md., is reported to construct 150 mi transmission line in Eastern Kentucky and furnish electricity for lamps and motors within radius of 60 mi. of Jenkins; increase output of Jenkins power plant from 5000 K. W. to 10,000 K. W.; D. A. Maurer of Jenkins is Constr. Engr.

Ky., Hardin.—City will install complete light and water-works plant for 1000 population; bids asked; L. C. Stark, Mayor. (See Machinery Wanted.)

Ky., La Center.—City is reported as considering construction of electric light plant. Address The Mayor.

Ky., Louisville.—Standard Lighting & Heating Co., capital \$1000, inceptd. by T. C. Vance, C. H. Franklin and George C. Devoil.

Ky., Paducah.—Board of Public Works petitioned City Council for appropriation of \$16,500 for municipal electric-light plant.

Ky., Princeton.—Princeton Light & Power Co. contemplates purchasing and installing 150 H. P. horizontal tubular boiler and one 100 K. W. 3-phase, 60-cycle, 2000-volt alternator; W. J. Holman is manager.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Ky., Varilla.—Kentucky Utilities Co., Harry Reid, V.-P., Lexington City National Bank Bldg., Lexington, Ky., is installing 2 new 500 H. P. B. & W. boilers and new Webster chimney; no further improvements contemplated. (Previously noted as purchasing plant.)

Miss., Canton.—Water and Light Comms. contemplate purchasing and installing 160 H. P. high-speed automatic engine, belt-driven centrifugal pump having capacity of 300 gal. to 400 gal. per minute and 350 cu. ft. air compressor, belt driven; John T. Sharp, Supt.

Miss., Ruleville.—Municipal Electric Light Plant, O. S. Anderson, Engr., asking bids on further equipment lately noted to be installed. (See Machinery Wanted.)

Mo., Eldon.—Eldon Light & Power Co. contemplates constructing street-lighting system consisting of 100 lamps; invites estimates on equipment.

Mo., Festus.—Electric Light Com. contemplates purchasing and installing 175 H. P., 150-lb. pressure, horizontal tubular boiler.

Mo., Mountain Grove.—Mountain Grove Ice & Electric Co. contemplates purchasing and installing 1 or 2 boilers and purchasing 2000 ft. copper wire.

Mo., Gower.—Gower Light, Heat & Power Co., capital \$10,000, inceptd. by Curtis Poe, John R. Allen and S. A. Groom.

Mo., St. Joseph.—City contemplates extending lamp circuits; proposes purchasing 2500 lbs. No. 8 weatherproof wire; A. L. Utz, Supt.

Mo., St. Charles.—St. Charles Electric Light & Power Co. secured authority from City Council to furnish electricity.

N. C., Fayetteville.—City let contract J. B. McCrary Co., Atlanta, Ga., to build electric-light plant costing \$50,000.

S. C., Ellenton.—Ellenton Fertilizer Co., capital \$15,000, inceptd. by H. M. Cassels and W. B. Cassels.

S. C., Camden.—City let general construction contract to Tucker & Laxton, Charlotte, N. C., at \$61,576.50 for electric-light plant and water-works; plans and specifications by Gilbert C. White, Engr., Charlotte, N. C. (See Water-works.)

S. C., Woodford.—J. W. Blain, Dr. J. G. Salley, J. J. Youghner and others interested in construction of electric-light system

Tenn., Jackson.—Jackson Ry. & Light Co. plans to increase capital stock from \$600,000 to \$700,000.

Tenn., Jackson.—City voted \$25,000 bonds to extend electric-light system and erect powerhouse. C. E. Griffin, Mayor. (Lately noted.)

Tex., Austin.—Austin Street Railway Co. is reported to have let contract for additional power unit to increase capacity of plant 1000 H. P.; also install 50,000-gal. cooling tank.

Tex., San Angelo.—J. D. Sugg is having plans prepared for street-car powerhouse.

Tex., Seguin.—City votes Feb. 19 on \$20,000 bonds, of which \$12,500 will be expended to improve light and water plants. Address The Mayor. (See Water-Works.)

FERTILIZER FACTORIES

Florida.—Florida Fertilizer & Oil Co. incorporated by C. H. Munger, W. C. Emerick and J. G. Lazarus, all of New York, to mfr. fertilizer and oil from menhaden; operate along Florida coast.

Ky., Upton.—Goodwin, Brown & Co., capital stock \$6000, inceptd.; continue present plant, manufacturing ballast and limestone fertilizer; John M. Goodwin, Prest.; W. T. Brown, Secy.-Treas.; E. G. Steubing, Supt.

FLOUR, FEED AND MEAL MILLS

Ala., Boyles (branch of Birmingham).—Smith Bros. Milling Co., 2415 1st Ave., let contract to erect 4-story mill and warehouse; purchased machinery; daily capacity 100 tons alfalfa mixed feed and 1500 bushels cornmeal. (Lately noted.)

Ky., Hopkinsville.—Acme Mills, W. B. Anderson, Jr., Prest., will operate feed mill, dairy, etc.; cost of machinery (purchased) \$6000; erect no buildings. (Lately noted.)

Ky., Owensboro.—C. W. Bransford, Prest., Bransford Mills, states company does not contemplate erecting buildings, installing new machinery, nor any change in present plant. (Lately noted planning to erect flour mill, etc.)

N. C., Summerfield.—Summerfield Milling Co., capital \$25,000, inceptd.; C. F. Shields, Prest.; W. M. Bennett, V.-P.; O. E. Shields, Secy.; D. L. Wright, Mgr.-Treas.; erect 30x48x42-ft. frame building; metal siding and roof; concrete basement; Sprout-Waldron

Co., Archt., Muncy, Pa.; cost of machinery (purchased), \$5000; daily capacity, 60 bbls. flour, 300 bus. meal and 15,000 lbs. feed. (See Machinery Wanted.)

Okla., Oklahoma City.—Swift & Co. (main office, Chicago, Ill.) will erect \$75,000 addition to plant on 1st St. to contain poultry department and feeding plant with capacity 25,000 head.

Tenn., Elizabethton.—Monarch Milling Co., capital stock \$25,000, inceptd. by Dr. Hunter (Prest.), J. R. and C. T. Hendrix, J. M. Barnes and others; continue established plant.

Tex., San Antonio.—Eldridge Sugar & Feed Co. being organized by D. J. Woodward and others to erect plant to manufacture stock food; annual capacity 100,000 tons.

W. Va., Moundsville.—Gorby & Shiltz will install mill to grind corn; electric motor.

FOUNDRY AND MACHINE PLANTS

Ky., Louisville.—Mill Roll Corrugating.—Louisville Mill Roll Corrugating Co., capital \$3000, inceptd. by Frank H. Stitzel, John E. Yember and David S. McElroy.

Ky., Louisville.—Culverts.—Kentucky Culvert Mfg. Co., capital stock \$10,000, inceptd. by Garner E. Dalton, J. Pickering and J. Buechel.

La., Shreveport.—Stoves.—Louis Werner Stave Co., and not Louis Werner Stave Co., inceptd. with \$500,000 capital stock; recent report erroneous. (See Woodworking Plants.)

Mo., Kansas City.—Pumps.—Chandler Pump & Supply Co., capital stock \$50,000, inceptd. by Wm. H. Dunshee, F. M. Hale and Thos. Arnett.

Va., Blacksburg.—Machine Shops.—Theo. P. Campbell, Dean Virginia Polytechnic Insti-

Okla., Oklahoma City.—Indian Chief Oil & Gas Co., capital \$100,000, inceptd. by R. E. Avery and H. G. Schuck, Oklahoma City; A. L. Peer and W. J. Yeaton, Tonkawa.

Okla., Oklahoma City.—Gasoline.—June Gasoline Extracting Co., capital \$12,000, inceptd. by J. A. Peterson, E. D. Gotchy and Boss Boley.

Okla., Okmulgee.—New Year's Oil & Gas Co., capital stock \$9600, inceptd. by S. B. Leslie, F. C. Cowden and R. L. Scruggs.

Okla., Oklahoma City.—P & H Oil & Gas Co., capital \$25,000, inceptd. by C. R. Hoffer, W. B. Nichols and Chas. Phelps.

Okla., Sapulpa.—Excel Oil Co., capital \$10,000, inceptd. by H. R. Kerstetter, R. M. Weaver and E. R. Perry.

Okla., Sapulpa.—1914 Oil Co., capital \$25,000, inceptd. by S. J. Smith, C. G. Wertzberger and Ira J. Anderson.

Okla., Sapulpa.—H. A. Dougherty Oil & Gas Co., capital \$48,000, inceptd. by H. A. Dougherty and R. C. Menefee, Kansas City; and Frank A. Beebe, Oklahoma City.

Okla., Tulsa.—Scotland Oil Co., capital \$31,000, inceptd. by O. H. Leonard, Robert K. Souder, Tulsa; W. A. Kunkel, Bluffton, Ind.

Okla., Wilson (not a postoffice).—Manley Oil & Gas Co., capital \$24,000, inceptd. by Henry T. Pruitt, Comanche; H. M. McQueen, Pittsburgh, Pa., and others.

Okla., Tulsa.—Talbot Oil & Gas Co., capital \$5000, inceptd. by G. W. McCulloch, C. I. Winterringer and J. C. McCready.

S. C., Anderson.—Gas.—Anderson Gas Co. arranged to secure \$300,000 to improve and extend gas system; plans to supply Belton, Williamson and Pelzer.

Tex., Abilene.—Pipe Line.—Abilene Gas Co. will extend mains and laterals for furnish-

creasing capacity to about 50 tons; ordered machinery.

Ark., Hot Springs.—Jean Reutlinger of Brockman Produce Co., Little Rock, Ark., is reported to build ice and cold-storage plant to cost \$50,000.

Ga., Eastman.—Eastman Light & Ice Co., W. E. Davidson, Mgr., let contract to install 12-ton ice plant; erect 22x66-ft. mill-construction building; will also install electrical machinery. (W. E. Davidson lately noted to install ice plant.)

Md., Hurler.—Jefferson-Holt Ice Co. is reported to build ice plant.

Miss., Booneville.—Booneville Water-Works Co. contemplates installing 10-ton ice plant. A. W. Kearly, Gen. Mgr.

Mo., Moberly.—Moberly Artificial Ice Co. will postpone until fall lately noted improvements proposition, including building of ice-storage house; plans by Tait & Nordmeyer Engineering Co., International Life Bldg., St. Louis.

Mo., St. Louis.—American Wine Co. will erect one-story refrigerating plant at 1515-1517 N. Garrison Ave.; one story; cost \$20,000, exclusive of equipment; J. D. Fitzgibbon, contractor.

S. C., Warrenville.—Aiken Ice Co. is reported to build addition 24-ton absorption plant costing \$10,000 to \$15,000; ordered machinery.

Tenn., Cullieoka.—E. J. and T. H. Park of Cullieoka Produce Co. are promoting erection of ice and cold-storage plant.

Tenn., Etowah.—Crystal Ice & Cold-Storage Co., Box 638, will install refrigerating equipment for 10-ton raw-water ice plant; bids until Feb. 16; bids on 7½-ton plant also considered; exclusive of building and motor-driving equipment; lately noted to build ice and cold-storage plant. (See Machinery Wanted.)

Tex., Mexia.—Central Texas Ice Co., R. Horlock, Prest., will increase capital stock from \$60,000 to \$100,000 to build plants at other points.

Tex., Rockwall.—Artesian Ice Co., J. M. Thomas, Prest. (lately noted inceptd., \$15,000 capital stock), has purchased machinery; building completed.

Va., Fredericksburg.—John M. W. Green is reported to have organized company with \$30,000 capital to build ice and cold-storage plant.

IRRIGATION SYSTEMS

Tex., LaFeria.—LaFeria Co-operative Canal Co. is reported to enlarge canal so as to supply water to 10,000 acres land purchased by Southern Land Co., Brownsville. (See Land Development.)

IRON AND STEEL PLANTS

Ala., Mobile.—Steel Works.—Mobile Steel Co., Walter E. Voight, Prest., New York, increased capital stock from \$25,000 to \$50,000. (Previously noted inceptd., etc.)

LAND DEVELOPMENTS

Ark., Pine Bluff.—Ziba Bennett Plantation Co., capital \$10,000, inceptd.; Ziba Bennett, Prest.

Fla., Fort Meade.—W. O. White of St. Petersburg and others (representing Florida & Tennessee Land Co.) purchased 1650 acres land across Peace River from Fort Meade for \$30,000; develop portion of land for citrus fruit growing and divide portion into truck farms 10 to 40 acres each; proposes to irrigate tracts with water from surrounding lakes; conduct demonstration farm.

Fla., Miami.—Florida Engineering & Development Co., \$10,000 capital stock, inceptd.; C. E. Greening, Prest., 2 Dade County Security Bldg.; develop 35 acres fronting Bay Biscayne; improvements include dredging to make 500-ft. fill for seawall; cost \$120,000; date of opening construction bids not determined; Geo. N. Maurer, Secy.-Treas., is Engr. (Lately noted.)

Fla., St. Petersburg.—Gulf Beach Resort Co., A. T. Blocker, Prest., will establish town (Gulf Beach) on gulf south of John's Pass; expending \$100,000; townsite begins at John's Pass and extends south 1½ mi.; width 2 blocks; construct boulevard along gulf and on bay side entire length of town; shell road between 2 blocks; seawall along gulf and bay sides; will concrete into yacht basin with 7 ft. of water at mean tide, bayou, southeast of John's Pass, which divides key into 2 islands; erect fish and bait house; also construct water-works, sewer system and electric-light plant for town.

Ky., Maysville.—Ohio-Kentucky Development Co., capital \$20,000, incorporated by George R. Longnecker, E. L. Manchester and S. J. Moore.

PROPOSAL ADVERTISEMENTS

IN THIS ISSUE ARE

PUBLISHED ON PAGES 78 and 79

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tute, advises: No contracts awarded for mechanics and art building, plans by Carneal & Johnson, Richmond, Va.; construction under supervision D. O. Matthews, Supt. Buildings and Grounds. Architect states work delayed pending appropriation from Legislature. (Previously noted.)

W. Va., Charleston.—Traveling Cranes.—O. A. & H. G. Thayer Co., capital stock \$5000, inceptd. by G. H. Shrewsbury, O. A. Thayer, H. G. Thayer and others.

W. Va., Logan.—Guyan Machine Shops, capital stock \$25,000, inceptd. by W. H. Oliver, Jr., Bernard Shell, J. J. Ross and others.

GAS AND OIL ENTERPRISES

La., Lake Charles.—Big Nine Oil Co., capital \$50,000, inceptd.; Jefferson D. Pace of Rapides Parish, Prest.; Henry O. Pfeiffer, V.-P., Marshall, Tex.; W. E. Patterson, Secy.-Treas., Lake Charles.

Okla., Ada.—Buckhorn Oil & Gas Co., capital \$30,000, inceptd. by Robt. Hatcher and Ben Starrett of Bebee, Okla., and R. F. King of Ada.

Okla., Ardmore.—Bull Head Oil Co., capital \$18,000, inceptd. by L. S. Dolman, T. H. Dunn and J. Robt. Gillam.

Okla., Charleston.—Charleston Oil Co., capital \$20,000, inceptd. by F. B. Inboden and Noble Beattie of Charleston and H. D. Newman of Oklahoma City.

Okla., Cleveland.—Coronado Oil & Gas Co., capital stock \$25,000, inceptd. by G. W. Sutton, J. B. Myers and Geo. Reynolds.

Okla., Council Hill.—Pinson Oil Co., capital \$5000, inceptd. by Otto E. Sump and D. P. Hawkins of Council and R. W. Talbot of Muskogee.

Okla., Hennessey.—Turkey Creek Valley Oil & Gas Co., capital stock \$30,000, inceptd. by John Duffy, Fred S. Will and M. A. Mitchell.

Okla., McAlester.—City voted to grant franchise to Homer Gas & Oil Co. (J. L. Moran and Tom George of Bartlesville and others) to furnish natural gas; propose to pipe gas 20 mi. from wells at Ashland. (Lately noted inceptd. with \$300,000 capital.)

ing natural gas; maximum diam. of pipe 8 in.; let contract for 16 mi. piping.

Tex., Marlin.—Pipe Line.—City Council granted franchise to C. T. Herring and others to distribute natural gas; plan to build pipe line from Groesbeck to Calvert by way of Marlin and Bremond.

Tex., Wichita Falls.—American Oil & Gas Co., capital stock \$63,000, inceptd. by G. R. Bean, W. A. Reid and Frank Kell.

W. Va., Clarksburg.—Mathers Oil & Gas Co., capital stock \$16,000, inceptd. by Oeland West and J. W. Agnew of Clarks.

W. Va., Fairmont.—Gas Pipe Lines, etc.—Fairmont Gas Co. purchased by J. H. Wheelwright of Consolidation Gas Co., Fairmont and Baltimore, Md.; elected Mr. Wheelwright Prest.; V.-P., Jas. O. Watson of Fairmont; Gen. Mgr., C. H. Evans of Evans Engineering Co., Chicago; controls 14,000 acres gas prop. rtes, pipe lines, etc.; capital stock \$3,000,000.

W. Va., Huntington.—Huntington Development & Gas Co., 102 Robson-Prichard Bldg., contracted for 20 mi. 12-in. pipe lines; will erect 20x30-ft. regulator station and 6-room dwelling for workman; cost (without mechanical equipment) \$6000; ordinary construction; tile and slate roof; architect not selected; expects to build, early in 1915, gas pumping station to cost \$250,000, and may build 40 mi. 12-in. pipe line; John J. Nash, Engr. (See Machinery Wanted.)

W. Va., Parkersburg.—Ozark Petroleum Co., capital stock \$25,000, inceptd. by Dorro Casto, E. W. Wilkinson, Geo. Meyers and others.

W. Va., Wheeling.—Big Ben Oil & Gas Co., capital stock \$100,000, inceptd. by Geo. W. Kalbitzerm, Perry E. Fisher, J. T. McCrum and others.

ICE AND COLD-STORAGE PLANTS

Ala., Bessemer.—Tennessee Coal, Iron & R. R. Co., Birmingham, is not building an ice factory. (Lately noted to construct ice factory.)

Ala., Gadsden.—Alabama City, Gadsden & Attalla Ry. will install additional unit in-

Ky., Paducah.—Sanitola Springs Co. organized; W. V. Eaton, Pres.; Dr. J. D. Robertson, V.-P.; C. P. Kiener, Secy.; will develop parts of 2 city blocks; erect hotel-sanatorium, baths, natatorium, construct parks, etc.; cost of improvements, \$100,000; construction bids opened in early spring; date not determined. (Lately noted inceptd., \$100,000 capital.)

La., New Orleans.—Tickfaw Land Co., capital \$65,000, inceptd. by W. W. Hines, Josephine Wright and Alfred D. Preston.

Mo., Kansas City.—Hillside Land Co., capital \$5,000, inceptd. by John K. Shinn, Jr., Ellen M. Binnie and N. De Barr.

Mo., Kansas City.—Arcadia Fruit Land Co., capital \$30,000, inceptd. by J. O. Watkins, S. J. Brown and H. C. Page.

N. C., Bolton.—North Carolina Co., First National Bank Bldg., Chicago, organized with \$375,000 capital stock; purchased 230,000 acres Columbus and Brunswick county cut-over and swamp; will develop; drain where necessary.

N. C., Belhaven.—Pungo Deep Soil Development Co., capital \$125,000, inceptd. by O. D. McLean, J. A. Wilkinson and S. W. Wilkinson, all of Washington, N. C.

N. C., Charlotte.—Pegram-Wadsworth Land Co. will develop property in North Charlotte for industrial and manufacturing plant sites.

N. C., Wilmington.—G. A. P. Bowman, Gen. Mgr., Dixie Land & Development Co., Suite 302, Southern Bldg., states is developing South Wilmington Heights as residence section.

N. C., Wilmington.—Belfast Land Co., capital stock \$100,000, organized with Dr. Sam R. Maxwell, Pres., and W. B. Herring, Secy.-Treas.; secured property near Carolina Beach and divided into 201 5-acre farms; will plant each farm in grapes, 100 vines to acre; also plans to develop Myrtle Grove Beach, ¼ ml. from Carolina Beach, as resort. (Lately noted inceptd.)

Okla., Oklahoma City.—Listen Development Co., capital \$350, inceptd. by A. L. Edgington, Kirby Frans and J. E. Sidwell.

Tenn., Chattanooga.—Suburban Estates Co., capital \$100,000, inceptd. by Theo. F. King, Frank Spurlock, A. W. Gaines and others.

Tenn., Nashville.—Hortense Developing Co., capital stock \$25,000, inceptd. by J. B. Mullins, Searcy Scales, W. J. Franklin and others.

Tex., Brownsville.—Southern Land Co. acquired 10,000 acres land between LaFeria and Harlingen; proposes colonizing with North Texas farmers; tract to be watered from LaFeria Co-operative Canal, which it is planned to enlarge; J. L. Wortman in charge Brownsville offices.

Va., Lynchburg.—Monroe Land Corp., A. W. Mosby, Secy. and Mgr., will develop 350 acres; subdivide into building and villa sites and small farms; C. L. De Mott, Lynchburg, Engr. (Lately noted inceptd., \$10,000 capital.)

W. Va., Buckhannon.—Allegheny Fruit Farm Co., Box 447, will develop 900 acres for fruit growing; will clear 600 acres; cost \$30 per acre; Mr. White, Engr. in charge, White Sulphur Springs, W. Va. (Lately noted inceptd., \$10,000 capital stock, by C. S. Holden and others.)

W. Va., Princeton.—Mountain Park Land Co., capital stock \$25,000, inceptd. by I. F. Saunders, A. E. Calfee, W. H. Strahley and others.

LUMBER MANUFACTURING

Ark., Arkansas City.—Desha Land & Timber Co. inceptd.; capital stock \$200,000; H. M. Lewis, Pres.; Wallace Townsend, V.-P.; S. S. Ford, Secy.; J. L. Parker, Treas.

Ark., Arkansas City.—Detroit-Arkansas Logging Co., capital stock \$100,000, inceptd.; B. J. Terry, Pres.-Treas.; Jack Bernhardt, V.-P. and Secy.

Ark., Lead Hill.—Albert Estes will build sawmill to mfr. hardwood lumber.

Ark., Stone County.—Duff & Hetzler, stove manufacturers, Brinkley, Ark., and Clarksdale, Miss., are reported to have purchased white oak timber on Turkey Creek in Ozark National Forest; contract calls for removal of 100,000 ft. timber monthly, cutting period extending to Dec. 31, 1915.

Ky., Earnestville.—Sturgeon Sawmill, Logging & Steam Tram Road Co., Ida May, Ky., organized; A. A. English, Pres. and Mgr.; Jno. W. Megown, Secy.-Treas., Earnestville; will operate plant fully equipped. (Lately noted inceptd., Ida May, with \$2000 capital.)

Ky., Pineville.—Ben F. Hawn Lumber Co. organized; Ben F. Hawn, Pres.-Mgr.; J. M. Gilbert, V.-P.; J. R. Hawn, Secy.-Treas.; mainly completed buildings; installed machinery of daily capacity 15,000 ft. lumber. (Lately noted inceptd., \$15,000 capital stock.)

La., Lawhon.—T. J. Lawhon will rebuild sawmill lately noted burned; temporary building costing within \$500; machinery purchased.

La., New Orleans.—Dudley Lumber Co., Memphis, Tenn., is reported to establish plant.

Miss., Laurel.—Marathon Lumber Co., W. H. Bissell, Pres., Wausau, Wis., is reported as having plans and specifications to build large plant; rumors state has adopted steel and concrete construction. (Lately noted.)

Miss., Paulding.—Lyon Bros. Lumber Co., Heidelberg, Miss., purchased timber land 5 ml. from Paulding and will build sawmill.

Miss., Vicksburg.—Steve Spengler will rebuild planing mills burned at estimated loss of \$40,000.

Mo., Webb City.—Coyne Lumber Co., capital \$24,000, inceptd. by W. W. Davis, T. F. Coyne and Louise Coyne.

Miss., Wesson.—Eastern Hardwood Mfg. Co. is reported to build hardwood mill of 50,000-ft. capacity.

N. C., Zebulon.—Gettuss-Martin Lumber Co., capital \$9000, inceptd. by W. B. Gettuss and M. A. Gettuss of Zebulon and A. H. Martin of Eagle Rock.

Tenn., Harriman.—W. R. Howard, Hopkinsville, Ky., purchased 500 acres timber land and will build sawmill of about 10,000 ft. daily capacity.

Tenn., Memphis.—Gayoso Lumber Co. is reported contemplating erection of plant in South Memphis to cost \$50,000.

Tex., Beaumont.—International Crosscutting Co. will build sawmill and mfr. paving blocks; acquired tract timber land and will utilize stumpage in operation of plant.

Va., Bath County.—J. E. Moore and Edwin Moore of Danville, Pa., purchased 12,000 acres timber land in Allegheny Mountains, Bath county, for about \$105,000. (J. E. Moore Lumber Co. of Danville, Pa., previously noted to have optioned 20,000 acres.)

METAL-WORKING PLANTS

Ga., Savannah.—Roofing.—Southern States Iron Co., in charge of H. Falenwider, V.-P. East Birmingham, Ala., will mfr. roofing; location, River and Barnard Sts.

Ky., Covington.—Art Bronze.—Michaels Art Bronze Co., capital stock \$30,000, inceptd. by F. L. Michaels, Maurice L. Galvin and Philip G. Queal; secured property for plant.

W. Va., Wheeling.—Shingles.—Wheeling Metal & Mfg. Co. will erect addition to plant at Glendale; reported to equip for manufacturing galvanized iron and tin shingles.

MINING

Mo., Leeds.—Marble.—National Marble Co., 323 Reliance Bldg., Kansas City, Mo., organized; Addison Madeira, Pres.; R. L. Ireland, V.-P.; J. L. Tuppy, Secy.; Addison Madeira, Sales Mgr.; let contract to R. F. Houston, Kansas City, to erect addition to plant; cost \$5000; cost of additional machinery (purchased), \$6000; product, marble for building interiors. (Lately noted inceptd. at Kansas City with \$20,000 capital.)

Mo., Midway (not a P. O.).—Lead and Zinc. J. M. Short and others, Kansas City, are reported to erect mill on James Luke land.

Mo., St. Louis.—Lead and Zinc.—Hamilton Mining, Milling & Timber Co., capital stock \$150,000, inceptd. by A. B. Hamilton, M. E. Hamilton, J. H. Roach and others.

Okla., Miami.—Mizpah Mining Co., capital \$5000, inceptd. by Jas. F. Robinson, Geo. L. Coleman and Ralph J. Tuthill.

Okla., Miami.—Neversweat Mining Co., capital \$8000, inceptd. by Jas. F. Robinson, Geo. L. Coleman and Roy T. Willis.

Tenn., Black Fox.—Silex.—Silex Atomizing Co. organized by F. U. Wintes (Pres.), Claude Whiteside and others, all of New York; plans to develop silex deposits on about 40 acres.

Tenn., Bristol.—Zinc.—Virginia Zinc & Chemical Co. organized by John T. Williams & Son to continue zinc developments.

Tenn., Knoxville.—Marble.—Candora Marble Co., capital \$5000, inceptd. by J. J. Craig, S. A. Rodgers, W. J. Donaldson and others.

Tenn., Nashville.—Lead and Zinc.—Tennessee Lime & Lead Co., capital \$100,000, inceptd. by John Burnham, B. S. Adams, Paul G. Chace and others.

W. Va., Fairmont.—Sand.—East Sides Utilities Co., C. D. Robinson, Pres., will develop sand deposits on Valley River.

MISCELLANEOUS CONSTRUCTION

Fla., Miami.—Dredging.—Florida Engineering & Development Co., C. E. Greening,

Pres., 2 Dade County Security Bldg., will dredge in Bay Biscayne to make 500-ft. fill for seawall. (See Land Developments.)

Fla., Palatka.—Docks.—City Council and Board of Trade are promoting construction of municipal docks.

Ga., Dublin.—Mausoleum.—Georgia Mausoleum Assn., F. G. Corger, V.-P., contemplates erecting mausoleum to cost \$50,000.

Ga., Savannah.—Coal-storage Plant.—Atlantic States Coal & Coke Co. (subsidiary to Clinchfield Fuel Co., Spartanburg, S. C.), Wesley Merritt, representative, is arranging to construct facilities for handling coal from cars direct or from storage pile to lighters; details not determined; general offices, Richmond, Va.

La., Shreveport.—Revetment.—Caddo Levee Board let contract Miller Engineering Co., Little Rock, Ark., to construct revetment on Red River at Battling Slough, Twelve-Mile Bayou, Dixie and Long Point; cost about \$150,000.

La., Shreveport.—Levee.—For Caddo Levee Board's bank protection work on Red River, Contractors Doullut & Williams, American National Bank Bldg., Shreveport, are asking bids on further materials and supplies, including lumber, cement, reinforcement, rock, pump and crusher; total construction previously (in October) noted to cost \$750,000; 12 reaches in contract; October item stated supplies, excepting cement, then contracted for one reach. (See Machinery Wanted.)

N. C., Spray.—Central Power Plant.—Marshall Field & Co., Chicago, engaged F. P. Sheldon & Son, Industrial Trust Bldg., Providence, R. I., to prepare plans and specifications to construct central power plant for cotton mills controlled by Field & Co.; no details determined. (Lately reported to cost \$150,000.)

N. C., Wilmington.—Docks and Wharves.—City Council rescinded action calling election on Feb. 5 to vote on \$150,000 bonds to construct docks and wharves; probably order another election to vote on \$200,000 bonds; Thos. D. Meares, City Clerk and Treas. (Lately noted.)

Tenn., Memphis.—Subway.—Chicago, Rock Island & Pacific Ry. let contract Fox Construction Co., El Reno, Okla., to construct subway on Georgia Ave. to form part of approach to new freight terminal.

Tex., Caldwell.—Levee.—J. D. Metcalfe, C.E., Pearsall, Tex., will prepare plans and estimates for repairing and raising portion of Burleson county levee damaged by recent flood waters of Brazos River at estimated loss of \$500,000.

Tex., Galveston.—Coal-storage Plant.—Atlantic States Coal & Coke Co. (subsidiary to Clinchfield Fuel Co., Spartanburg, S. C.), Wesley Merritt, representative, proposes to construct coal-storage plant; general offices, Richmond, Va.

Va., Norfolk.—Pier.—Geo. W. Duval Co. will rebuild pier (occupied by People's Navigation Co.) reported burned at estimated loss of \$18,000.

Va., Norfolk.—Dedging.—Government will dredge inland waterway from Norfolk, Va., to Beaufort Inlet, N. C.; bids until Feb. 20; E. Eveleth Winslow, Lt.-Col., Engrs. (See Machinery Wanted.)

MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Laundry.—White Swan Laundry Co., Edwin C. Stafford, Secy.-Treas., having plans prepared by E. B. Van Keuren for laundry; site 100x140 ft.; 2½ stories; mezzanine floor; reinforced concrete throughout, including floors and walls; "saw-tooth" roof, built of steel and wire-reinforced glass; runways from street within building on first floor to facilitate loading and unloading wagons; offices on first floor; remainder of first floor and entire second floor for laundry equipment; shower baths; estimated cost \$100,000.

Fla., Tampa.—Laundry.—Latin-American Laundry, capital stock \$25,000, inceptd.; S. V. M. Ybor, Pres.; J. C. Salas, V.-P.; J. M. Nogueira, Gen. Mgr.; J. S. Franco, Secy.-Treas.

Ky., Dawson Springs.—Bottling.—Dawson Springs Bottling Co., capital stock \$75,000, inceptd. by J. Y. Cananiss, L. A. Tucker, Edward F. Webb and others; will erect bottling plant to cost \$25,000; plans to erect amusement building.

Ky., Hopkinsville.—Dairy.—Acme Mills, W. B. Anderson, Jr., will operate dairy. (See Flour, Feed and Meal Mills.)

Ky., Louisville.—Hardware.—Orndorff Hardware Co., capital \$5000, inceptd. by G. A. Smith, W. K. Smith and Ben H. Pulliam.

Ky., Louisville.—Publishing.—Grill Pub-

lishing Co. inceptd. by H. I. Fox, J. E. Merriek and J. C. Armstrong.

Ky., Louisville.—Automobile Supplies.—Dixie Auto Supply Co., capital \$5000, inceptd. by Albert H. Drake, Herman Jansen and J. A. Kolb, Jr.

Mo., Kansas City.—Contracting.—Kaw Construction Co., capital stock \$5000, inceptd. by Jos. J. Helm, Wm. R. Taylor and Conrad Mann.

Mo., St. Louis.—Dairy.—Southern Illinois Milk Producers, Cyrus Love, Pres., Worden, Ill., will establish dairy; arrangements not completed; later will install machinery. (Cyrus Love lately noted interested in organizing company with \$400,000 capital stock to establish dairy.)

Mo., St. Louis.—Architects' Supplies.—Ruckert Architects' Supply Co., capital stock \$12,000, inceptd. by Phillipina Ruckert, Ewald Schuettner and Fred Eistrup.

N. C., Concord.—Laundry.—Cabarrus Laundry Co., capital \$3000, inceptd. by J. F. Cannon, Nell T. Edison and F. F. Richardson.

Okla., Fort Cobb.—Hardware.—B. H. Stewart Hardware Co., Florence Stewart, Pres. (lately noted inceptd., capital stock \$10,000), let contract to Stewart & Welderson, Oklahoma City, to erect \$2000 25x80-ft. ordinary construction building.

Okla., Goltry.—Publishing.—Socialist Publishing Co., capital \$1200, inceptd. by Gustav Hollander and Frank Crawford of Goltry, S. H. Calwick, Helena, Okla., and H. C. Geist of Aline, Okla.

Okla., McAlester.—Laundry.—Fair Deal Laundry, capital \$4000, inceptd. by Jas. B. Dowell, Henry F. Schreiner and Rufus A. Johnson.

Okla., Oklahoma City.—Cleaning and Dyeing.—Liggett Cleaning & Dyeing Co., capital \$3000, inceptd. by B. W. Liggett, E. D. Ferguson and Ollie Tye.

S. C., Spartanburg.—Poultry Supplies.—Spartanburg Poultry Supply Co., capital stock \$3000, inceptd. by C. W. Anderson, S. B. Dillard and J. D. Erwin.

S. C., Union.—Hardware.—Stone-Jones Hardware Co., capital \$10,000, inceptd. by E. S. Stone and D. N. Jones.

Tenn., Chattanooga.—Dairy.—F. O. Rettig purchased Sprague Dairy Co.'s plant for \$25,000.

Tenn., Memphis.—Transfer.—Star Transfer & Storage Co., capital \$2000, inceptd. by E. H. Dorion, C. L. Duncan, J. E. Gemignam and others.

Tex., Center Point.—Grain Elevator.—Center Point Grain & Elevator Co. is reported to erect grain elevator and warehouse of 25,000 bus. capacity.

Tex., Denton.—Laundry.—Denton Steam Laundry, capital stock \$20,000, inceptd. by James L. Roxburgh, J. J. MacLachlan and Leo Zumwalt.

Tex., Houston.—Printing.—Southern-Key-stone Printing Co., capital stock \$30,000, inceptd. by Harry T. Tyner, William T. Pankey and Guy C. Harris.

Tex., Dallas.—Laundry.—Ideal Laundry Co. will erect addition at 3224 Ross St.; cost \$3000.

Tex., Mineral Wells.—Mineral Water.—Famous Mineral Wells Water Co., capital stock \$10,000, inceptd. by E. E. Dismuke, J. R. Moss and A. J. Moss.

Tex., San Antonio.—Dairy.—Myrtle Park Dairy Co., capital stock \$10,000, inceptd. by Sidney H. Wels, E. J. Hutcheson and Sam Alexander.

Tex., Wichita Falls.—Publishing.—Searchlight Publishing Co., capital stock \$10,000, inceptd. by Edgar P. Haney, J. D. Douglas and H. J. Hagor.

Va., Maywood.—Penroyer-Ketner Co., capital stock \$50,000, inceptd. by Wm. A. Penroyer, Maywood; J. H. D. Ketner, Riverdale, Md., and C. A. Pfau, 1205 6th St. N. W., Washington, D. C.

Va., Norton.—Electric Supplies.—Horton Electric Supply & Equipment Co., capital stock \$100,000, inceptd. by W. P. Keller, Geo. E. Roebuck, E. R. Jackson and others.

Va., Portsmouth.—Contractors' Supplies.—Portsmouth Contractors' Supply Corp., capital stock \$50,000, inceptd.; Arthur G. Glasgow, Pres., London, Eng.; Richard B. Tucker, V.-P. and Treas., Norfolk; C. M. Megninley, Secy., Portsmouth.

W. Va., Clarksburg.—Grain Elevator.—S. C. Watkins & Co. will rebuild grain elevator; 125x100 ft.; fireproof; cost \$20,000; electric lighting; cost of elevator equipment, \$15,000. (Lately reported damaged by fire.)

W. Va., Huntington.—Construction.—R. W. Stone Construction Co., capital stock \$10,000, inceptd. by R. W. Stone and Mrs. R. W. Stone of Stone, Ky.; J. B. Deskins and W. M. Deskins of Nolan, W. Va., and others.

MISCELLANEOUS FACTORIES

Ala., Birmingham—Distillery.—Kentucky Distilling Co., capital stock \$10,000, inceptd.; J. D. Evans, Prest.; G. M. Wray, Secy.; T. D. Howie, Treas.

Ala., Birmingham—Paper Boxes.—T. M. McClellan, Prest. Birmingham Paper Co., interested in establishing paper-box and carton factory; organize company with \$25,000 capital stock; subsidiary of Birmingham Paper Co.; occupy building erected by latter company on Ave. E.; 30,000 sq. ft. floor space; ordered machinery.

Ala., Ensley—Ice-cream.—Pure Ice-Cream Co. inceptd. with W. J. Abele Prest., F. J. Lange and Thomas Clark, V.-Ps., T. F. West Secy., F. W. Lange Treas.

Ala., Gadsden—Lime.—Legardo Lime & Stone Co. will rebuild 2 kilns at Legardo; let contract.

Ala., Gadsden—Water Cut-off Device.—Wm. H. Daniel of Daniel Mfg. Co., Birmingham, is reported as considering building plant to mfr. patented water cut-off device; proposed to organize company with \$10,000 capital stock.

Ark., Batesville.—W. A. Edwards & Son Co., capital stock \$25,000, inceptd.; W. A. Edwards, Prest.

Ark., Nashville—Bottling. Ice Cream, Candy, etc.—Producers' Exchange and Clearing-house advises will incorporate with \$25,000 capital; erect building on present property; conduct manufacturing business, including bottling works, ice cream, peanut cleaner and sheller, candy, butter, canning and preserves, bakery, cold storage or iceless refrigeration. (See Machinery Wanted.)

Ark., Newport—Bottling.—Sip Bottling Corp., Memphis, Tenn., is reported to establish plant.

D. C., Washington.—Corby Co. will remodel 3-story factory on Channing St.; cost \$15,000; C. B. Comstock, Archt.; Frank L. Wagner, Contr., 1413 H St. N. W.

D. C., Washington—Ice Cream.—Fussell Ice Cream Co., 1324 14th St. N. W., will install 3 motors, compressor and crusher; cost \$4400; let contract for equipment.

D. C., Washington—Bakery.—Copperthite Pie Baking Co., capital stock \$55,000, inceptd. by Henry Copperthite (3136 O St. N. W.), W. E. Van Dusen, G. W. Offutt and others.

D. C., Washington—Chemists.—J. S. Tyree, 15th and H Sts. N. E., inceptd., \$1,000,000 capital stock; J. S. Tyree, Prest.; G. A. Lewis, Secy.-Treas.

Fla., Jacksonville—Bakery.—Dorsey-O'Neill Bakery will let contract Feb. 1 to erect bakery; 2 stories; install 3 ovens; pressed brick; common brick; reinforced concrete; electric lighting; sanitary plumbing; composition roof; cost \$20,000.

Fla., Pensacola—Excelsior.—M. G. Hoffman is reported to build excelsior factory.

Fla., Jacksonville—Bakery.—A. B. Anderson Grocery & Baking Co., A. B. Anderson, Gen. Mgr., will install bakery; secured building at 312-314 Main St. and will remodel.

Fla., Tampa—Cigars.—Val Antonio let contract Guekin & Hyer, Tampa, to erect addition to cigar factory; 39x100 ft.; brick; 3 stories; 50-ft. tank attached; cost about \$25,000.

Fla., Ybor City, P. O. Tampa—Cigars.—Correl-Wodiska y Ca. let contract to G. A. Miller, Tampa, to erect addition to factory; 40x60 ft.; cost (without mechanical equipment), \$10,000; ordinary construction; composition roof; electric lighting; hand elevator; plans by owner.

Ky., Greendale—Shoes.—E. H. Ray, Secy. Prison Com., Frankfort, states lately-noted shoe factory will be established, simply requiring rearrangement of present quarters and some new machinery.

Ky., Kragon, P. O. at Quicksand—Wood Alcohol, etc.—Kentucky Wood Products Co., capital \$50,000, organized; Wm. Muir, Prest.; John L. Emerson, V.-P.; E. O. Emerson, Jr., Secy.-Treas.; all of Titusville, Pa.; Kennard Ragon, Gen. Mgr., Quicksand; officers and W. W. Tarbell, Philadelphia, Pa., are the directors; constructing plant to cost \$35,000; minimum daily capacity, 25 cords; built, excepting retorts, to triple capacity; mfr. wood alcohol, etc.; steel work by Struthers-Wells Co., Warren, Pa.; copper installations by Case Mfg. Co., Buffalo, N. Y. (Lately noted to be built by W. W. Tarbell and others.)

Ky., Paducah—Hydro-Aeroplanes.—Benholst Hydro-Aeroplane Co., St. Louis, Mo., is reported to establish plant.

La., Algiers, Station A. New Orleans—Distillery.—Algiers Distilling Co., A. J. Oliver, Prest., purchased Security Brewing Co.'s plant in Algiers and will equip as distillery; company capitalized at \$750,000.

La., New Orleans—Sulphuric Acid.—Swift & Co. (main offices, Chicago, Ill.) are reported to build sulphuric-acid plant to have annual capacity 20,000 tons acid; 27-acre site.

La., New Orleans—Macaroni.—Southern Macaroni Mfg. Co., S. Peters and Girod Sts., organized; Leon G. Tujague, 413 S. Peters St., Prest. and Mgr.; Louis Robichaux, V.-P.; Albert Tujague, Secy.-Treas.; install motors, boiler, fans, etc.; also macaroni and package machinery; capacity, 100 sacks flour daily. (Lately noted inceptd., \$40,000 capital stock.)

La., New Orleans—Condiments.—Standard Condiment Co., 600 Tchoupitoulas St. (lately noted inceptd., capital \$25,000), organized; Henry H. Berlin, Prest.; Thos. L. Hardin, Jr., Secy.-Treas.; acquired plant of Thos. L. Hardin Co., with its practically new building, machinery, fixtures, etc.; mfr. sauces, ketchup, mustard.

La., Shreveport—Bags.—Dan W. Fefel will erect bag factory and warehouse; 5 stories; 87x110 ft.; mill construction; brick, steel, mill work and cement trimmings; composition roofing; concrete cornice; metal and wire-glass skylight; ceramic tiling; electric fixtures; 3000-lb. freight elevator; Leon C. Weiss, Archt., 621 Maison Blanche.

Md., Annapolis.—Daylight Mfg. Co., capital \$2000, inceptd.

Md., Baltimore—Bags and Burlap.—Burnett Bag & Burlap Co., 7 E. Camden St., leased building at Howard and Ostend Sts. and will use as bag and burlap factory.

Md., Baltimore—Industrial Building.—Sam Rosenthal let contract Chas. L. Stockhausen, Marine National Bank Bldg., to erect industrial building; first floor for stores; upper floors for light manufacturing. (See Stores under Contracts Awarded.)

Md., Perryman—Creamery.—Perryman Creamery Assn., W. Carl Holloway, Secy.-Treas., erected plant costing \$6000 complete; building and machinery contracts let to Williams Construction Co., 900 W. Lake St., Chicago; 24x47-ft. building; plant capacity 1200 lbs. milk per hour. (Lately incorrectly noted.)

Miss., Como—Bottling.—Sip Bottling Corp., Memphis, Tenn., is reported to have secured building for bottling plant.

Miss., Rosedale—Bottling.—Sip Bottling Corp., Memphis, Tenn., is reported to establish plant; erecting building.

Mo., Kansas City—Gun-vending Machines.—Penny Gum-vending Machine Co., capital \$2000, inceptd. by Jos. S. Bailey, H. J. Wilkinson and John A. Johnston.

Mo., Mountain Grove—Overalls.—Mountain Grove Overall Co. (lately noted inceptd., capital \$5000) will continue operation of overall factory recently established; present daily capacity 15 dozens; L. H. Williams, Prest.; Dr. E. J. Butzke, V.-P.; E. J. Green, Treas.; L. H. Slaughter, Secy.-Mgr.

Mo., St. Joseph—School Tablets, etc.—Western Tablet Co. let contract for lately-noted 2-story 70x300-ft. addition; manufactures school and writing tablets.

Mo., St. Louis—Stationery.—S. G. Adams Stamp & Seal Co. will repair fire damage to building at 410-414 N. 6th St.; estimated cost \$8000; C. H. Deitering, Archt.; C. B. McCormack, contractor. (Lately reported burned.)

Mo., St. Louis—Beer.—St. Louis Bottle Beer Co., capital stock \$2000, inceptd. by Ferd Gase, Alex. Gast and H. R. Williams.

Mo., St. Louis—Cholera Serum.—American Hog Cholera Serum Co., capital stock \$25,000, inceptd. by Turner S. Gordon of Columbia, Mo.; John F. Mielert, Wm. Kohn, L. Frank Ottofy and Frank S. Hanna, all of St. Louis.

Mo., St. Louis.—A. H. Sullivan Mfg. Co., capital \$30,000, inceptd. by A. H. Sullivan, D. H. Litch and A. F. Barnes.

Mo., St. Louis—Toilet Articles.—White Seal Mfg. Co., capital stock \$5000, inceptd. by B. L. Thayer, Al J. Rees and Anton Rees.

Mo., St. Louis—Cleaning Compounds.—Three Kays Carbon Compound Co., capital stock \$2000, inceptd. by A. S. Olin, Rosie Olin, Jos. Holtzman and Louis Radinski to mfr. cleaning compounds for engines, automobiles, etc.

N. C., Asheboro—Wheelbarrows, etc.—Asheboro Wheelbarrow Co., capital stock \$50,000, organized by J. S. Louis, G. H. Bean and E. L. Moffitt.

N. C., Goldsboro—Bakery.—Wayne Baking Co., capital \$2000, inceptd. by W. A. Robinson, C. F. Griffin and others.

N. C., Hickory—Overalls.—Hickory Overall Co. will increase capital stock from \$6000 to \$10,000.

N. C., Liberty—Perch Poles.—Liberty Perch Pole Co., capital stock \$25,000, inceptd.; R. E. Johnson, Prest.; J. H. Johnson, Secy.-

Treas.; J. D. Gregg and H. C. Johnson, V.-Ps.; mfr. perch poles for sanitary poultry system. (See Machinery Wanted.)

N. C., Winston-Salem—Bakery.—A. H. Upham will erect 2-story brick building for bakery; let contract Allen A. Perryman.

Okla., Oklahoma City—Press Controller.—Christopher Press Controller Co., capital stock \$25,000, inceptd. by B. F. Van Dyke and P. F. Slaton of Granite, Okla., and Coleman B. Christopher of Lone Wolf, Okla.

S. C., Greenville—Bagging.—Greenville Bagging Co. organized by Benj. Margolius of Norfolk, Va., and others; leased 3-story warehouse on East Court St. and will equip to mfr. bagging and ties.

Tenn., Chattanooga—Overalls.—J. F. Holbert will erect addition to overall factory, doubling capacity; building to be 2 stories, 40x100 ft.; steam heat; electric equipment; hot and cold water.

Tenn., Chattanooga—Paper, etc.—Archer Paper Co. (John Stagnaler and W. H. Weatherford) will continue established plant; jobbing only; will not mfr. (Lately noted inceptd., \$50,000 capital stock.)

Tenn., Dickson—Ice Cream.—R. Simon and L. B. Long are reported to establish ice-cream factory.

Tenn., Lewisburg—Bottling.—Sip Bottling Corp., Memphis, is reported to establish bottling and ice-cream plants.

Tenn., Memphis—Tires.—638 Tire & Vulcanizing Co. increased capital stock from \$1200 to \$15,000.

Tenn., Memphis—Syrup.—American Syrup & Extract Co., capital stock \$100,000, inceptd. by J. H. Sullivan, Frank Baldwin, E. H. Buck and others.

Tenn., Nashville—Candy.—Standard Candy Co., H. H. Campbell, Prest., 445 Second Ave. N. (lately noted burned), advises has purchased building and is equipping for candy manufacture.

Tex., Dallas—Bakery.—Kleber Baking Co., capital stock \$35,000, inceptd. by P. H. Kleber, F. M. Kleber and W. P. Kleber; continue present company and plans increasing plant's capacity; may erect building.

Tex., Houston—Mantels.—Standard Brick & Stone Co., 316 Union National Bank Bldg., Albert James, Prest. and Gen. Mgr., installed lately-noted equipment (cost \$3000) to mfr. granite-faced and various-colored "Lubert" mantels.

Tex., Orange—Wood Preservatives.—A. Schumann is reported to establish plant on Sabine River, 9 mi. from Orange, to mfr. wood preservatives.

Tex., San Antonio—Mattresses.—Duffy Electric Mattress Factory (Wm. Duffy, Propr.), 922 N. Pine St., contemplates rebuilding factory lately burned. (See Machinery Wanted.)

Va., Danville—Creamery.—Danville Creamery Co., capital \$20,000, inceptd.; will build creamery on Loyal St.; proposes daily capacity 200 lbs. butter; O. E. Hatcher, Prest.; E. O. Arey, Secy.

Va., Richmond—Paper.—Virginia Paper Co., capital \$60,000, inceptd.; R. G. Thornton, Prest.; D. M. Blair, Secy.

W. Va., Mannington—Window Glass.—Chamber of Commerce is negotiating with Jas. Adamson of Columbus, O., and associates relative to establishing window-glass factory; about 700x200 ft.; cost about \$75,000.

W. Va., Wheeling—Chemicals.—Richmond Chemical Co., capital stock \$25,000, inceptd. by Carl O. Schmidt, John J. P. O'Brien, E. E. Shaffer and others.

MOTORS AND GARAGES

D. C., Washington—Garage.—Jas. F. McGee, 1340 New York Ave. N. W., has plans by B. Stanley Simmons, 1340 New York Ave. N. W., for garage at 1531 M St. N. W.; 2 stories; steel and concrete; 42x167 ft.; cost \$16,000.

Ky., Central City—Automobiles.—Barnes Automobile Co., capital \$15,000, inceptd. by E. P. Barnes, J. L. Leach and C. V. Lisle.

Md., Baltimore—Garage.—Mrs. M. P. Baldwin will erect garage in rear of 717 Park Ave.; 2 stories; brick; 20x24 ft.; Cowan Building Co., Contr., 106 W. Madison St.

Md., Baltimore—Garage.—Frank W. Watts (V.-P. Lee Williamson & Co.), Fayette and Eutaw Sts., will erect garage in rear 2836 N. Charles St.; 2 stories; 19x24 ft.; Paul Emmart, Archt., 210 W. Fayette St.; Gustav A. Stohr, Contr., 2851 Pennsylvania Ave.

Mo., St. Louis—Automobiles.—A. H. Sullivan Mfg. Co., capital stock \$30,000, inceptd. by A. H. Sullivan, David H. Litch and Arthur F. Barnes.

N. C., High Point—Automobiles.—People's Motor Car Co., capital \$20,000, inceptd. by J.

C. Barker, W. M. Barber, J. W. Welborn and others.

N. C., Mebane—Automobiles.—Mebane Motor Co., capital stock \$25,000, inceptd. by W. A. Murray, P. L. Cooper, T. J. Carter and others.

N. C., Mt. Airy—Automobiles.—Mt. Airy Motor Co., capital \$10,000, inceptd. by M. E. Marshall, S. E. Marshall and G. F. Marshall. N. C., Raleigh—Garage.—J. S. Jennings will build garage; 28x100 ft.; cost \$4000.

Tex., Robstown—Garage.—John Brown let contract Sumrell & Knacker to erect garage at 4th and Main Sts.; 1 story; 50x80 ft.; concrete floor.

W. Va., Wheeling—Automobiles, etc.—Howe Co., 2154 Main St. (lately noted inceptd., capital stock \$25,000), will conduct general machinery and automobile business; J. McCann, Prest.; J. Henderson, V.-P.; H. E. Dunlap, Secy.-Treas.; R. W. Howe, Mgr.

W. Va., Wheeling—Cyclecars.—Woods Mobile Co., F. A. Woods, Prest., Chicago, Ill., is negotiating for site on which to build plant.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ala., Eufaula—Central of Georgia Ry., C. K. Lawrence, Chief Engr., Savannah, Ga., is reported to build roundhouse.

Tenn., Chattanooga—Cincinnati, New Orleans & Texas Pacific Ry. (C. Dougherty, Chief Engr., Cincinnati, O.) is reported to build plant for repairing and painting passenger coaches; shop to be of reinforced concrete and equipped to handle 12 coaches.

ROAD AND STREET WORK

Ala., Anniston—Calhoun County Comms. and State Highway Engr. let contract Goodrich & Crinkley, Anniston, at \$6000 to grade, drain and macadamize about 1 mi. Piedmont and Jacksonville Rd. (Call for bids lately noted.)

Ala., Mobile—City Comms. will pave municipal steel sheds with concrete; plans prepared and bids invited; cost not to exceed \$5000.

Ala., Montgomery—City let contract to Jamison & Halliwell, Montgomery, to construct lately-noted paving; bitulithic with brick in track; 17,000 sq. yds.; \$35,000 available; A. R. Glichrst, City Engr.

Fla., Auburndale—City, E. S. Anderson, Mayor, postponed lately-noted election on \$35,000 bonds for road construction.

Fla., Arcadia—De Soto county is reported to have voted \$200,000 bonds to construct brick and clay roads and bridges; V. W. Surrency, Chrmn. board. (Lately noted.)

Fla., Daytona.—C. M. Bingham advises that lately-noted construction is small amount of reinforced concrete and rock beach approach, cost \$750, by Daytona Beach and Daytona citizens.

Fla., De Land.—James N. Hazlehurst, Consist. Engr., Atlanta, Ga., prepared preliminary estimate of cost of grading and paving streets, including New York Ave., Boulevard and Indiana Ave.; brick or concrete-asphalt paving. (See Sewer Construction.)

Fla., Fort Meade.—City let contract Wilson Construction Co., Jacksonville, to pave Broad St. with vitrified brick laid on edge; cement grout filler; granite curbing; 17,000 sq. yds.; cost about \$30,000; H. S. Jaudon Engineering Co., Engr., Savannah, Ga.; A. H. Reagin, Chrmn. Street Com. (Call for bids lately noted.)

Fla., Melbourne.—Town will vote in Feb. on \$2000 bonds for street improvements. Address Town Clerk.

Fla., St. Augustine.—St. Johns County Comms., W. Wallace Snow, Clerk, will pave with asphalt macadam, concrete, vitrified paving brick or other suitable material 64 mi. (more or less) John Anderson Highway; 9 ft. wide from outside to outside of 4x10-in. curbing; bids with or without 5-year maintenance bond; A. F. Harley, Construction Engr., Jacksonville, Fla.; bids until Feb. 24. (See Machinery Wanted.)

Fla., St. Petersburg.—City let contract to Georgia Engineering Co., Augusta, Ga., for 50,000 sq. yds. brick laid flat and 70,000 lin. ft. granite curbing, at \$1.39 per sq. yd. for brick and 38 cents per lin. ft. for curb 4x14; J. O. Spencer, City Engr.

Ky., Bowling Green.—Warren county votes Feb. 25 on \$300,000 bonds to construct roads. Address County Comms. (Lately noted.)

La., Benton—Bossier parish will construct gravel road 46 mi. long extending from Benton to Bossier and to Red River parish line; \$175,000 bonds voted. Address Police Jury. (Previously noted.)

La., Crowley.—Acadia Parish Police Jury authorized issuance of \$170,000 bonds for road construction.

La., De Quincy.—City asks bids until Feb. 10 to construct proposed 82,000 sq. ft. concrete sidewalk and about 18,000 lin. ft. curb; plans with Mayor and with T. H. Mandell, Engr., Lake Charles, La. (See Machinery Wanted.)

La., New Orleans.—New Orleans Street Railway Co. is reported to shell Oak St. from Carrollton Ave. to Protection Levee.

La., New Orleans.—City, A. G. Ricks, Commr. of Public Finance, will pave Lowerline St. from Commercial to Esther St. with pitch lake asphalt; also construct sub-surface drains, culverts, curbs, gutter bottoms and sidewalks on same street; bids until Feb. 2. (See Machinery Wanted.)

La., Shreveport.—City let contract to Healy Construction Co., Meridian, Miss., to pave portions of Southern Ave. with gravel at 90 cents per sq. yd. and Kings Highway at 80 cents per sq. yd. (Lately noted.)

La., Shreveport.—Caddo parish let contract to Healy Construction Co., Meridian, Miss., to construct 20 mi. gravel roads costing \$100,000 plus cost of gravel furnished by parish; this includes \$20,000 of concrete work. (Previously noted.)

Md., Baltimore.—Board of Awards, John Hubert, Acting Prest., will grade, pave, curb and repave with sheet asphalt, vitrified brick and granite block on concrete base following streets: Contract No. 77, Oliver St. from alley west of Maryland Ave. to Maryland Ave., Trenton St. from Maryland Ave. to Charles St. and Morton Alley from Lafayette Ave. to Trenton St., vitrified block 820 sq. yds., granite block repaving 800 sq. yds.; contract No. 78, portions of Harlem Ave., Franklin, Mulberry, Lexington and Calhoun Sts., sheet asphalt 50,300 sq. yds. and vitrified block 5500 sq. yds.; contract No. 81, portions of Fremont Ave. and Paca St., vitrified block 16,600 sq. yds. and granite block 3400 sq. yds.; bids until Feb. 4; R. Keith Compton, Chmn. Paving Com. (See Machinery Wanted.)

Md., Baltimore.—State Roads Com., O. E. Weller, Chmn., 601 Garrett Bldg., asks bids until Feb. 10 to build 5 sections State highway, about 19.05 mi., in Anne Arundel, Charles, Frederick, Kent and Wicomico counties. (See Machinery Wanted.)

Md., Easton.—Talbot County Commrs., Jos. B. Harrington, Clerk, will construct portion of State-aid highway along Peachblossom Rd.; distance 1½ mi.; bids until Feb. 17; blank forms of proposals obtainable from State Roads Com., Garrett Bldg., Baltimore. (See Machinery Wanted.)

Miss., Greenwood.—Le Flore County Supervisors, A. R. Bew, Clerk, asks bids until Feb. 2 for improvements to Mississippi Post Rd. in Le Flore and Carroll counties, under supervision of U. S. Office of Public Roads; Greenwood to Carroll county hills, 8 (or 5) mi.; Greenwood to Shellmound, 9.71 mi.; Lucas Gin to Itta Bena, 6.38 mi. (See Machinery Wanted.)

Miss., Kosciusko.—Attala County Dist. No. 1, W. B. Potis, Prest. Highway Commrs., has \$150,000 for expenditure to construct 17 mi. road, including grading, graveling and pipe work; Xavier A. Kramer, Engr., Magnolia, Miss.; contract lately noted let to McTighe, Hughey & McTighe, Hazlehurst, Miss. (See Machinery Wanted.)

Miss., Aberdeen.—Healy Construction Co., Meridian, Miss., has contract to build 16 mi. macadam road.

Miss., Meridian.—Healy Construction Co., Meridian, has contract to build macadam and sand-clay roads; cost \$200,000.

Mo., Independence.—Jackson County Court instructed County Highway Engr. to invite bids to improve about 20 mi. roads: Grade and macadamize Oak Grove and Mecklin Rd., 4 mi.; grade and drain Lone Jack and Oak Grove Rd., 5 mi.; grade and drain Lone Jack and East Cunningham Road, 5½ mi.; macadamize Kiger Rd., 1 mi.; macadamize Holke Rd., 2 mi.; grade and drain Bruce Dodson Rd., 1 mi.; grade and drain M. T. Smith Rd., 1 mi.; open bids about middle of Feb.

Mo., Joplin.—City will construct 7 blocks asphaltic concrete paving on Broadway; V. C. Yantis, City Clerk, receives bids until Feb. 8; C. B. Anderson, City Engr.

Mo., Kansas City.—Davidson Construction Co. is lowest bidder at \$51,190 to macadamize Blue Ridge Blvd., 5.75 mi.

N. C., Louisville.—Louisburg Township of Franklin county voted \$40,000 bonds to construct roads. Address Township Commrs.

N. C., Madison.—Madison County Highway Commrs., J. B. Clingman, Engr., advises date of opening bids for road construction not fixed; previously issued \$300,000 bonds.

N. C., Sylva.—Town contemplates issuing \$30,000 to \$50,000 bonds for paving, sidewalks, water-works and sewer system. Address Town Clerk.

Okla., Tulsa.—City will construct 30,000 sq. yds. asphalt paving; T. C. Hughes, City Engr. (Lately noted as planning to pave E. 6th St., 12 blocks.)

S. C., Anderson.—Anderson county petitioned Legislature for authority to vote on \$300,000 bonds to construct roads. Address County Commrs.

S. C., Sumter.—City will pave Liberty St. from Harvin to Sumter St. Address The Mayor.

Tex., Alpine.—Brewster county voted \$50,000 bonds for road construction. Address County Commrs. (Lately noted.)

Tex., Belton.—Road Dist. No. 3 of Bell county will build 7 mi. road; W. S. Shipp, Belton county, Judge. (Lately noted as voting \$30,000 bonds.)

Tex., Belton.—Road Dist. No. 5 of Bell county will construct 100 mi. road outside Temple, Tex., and 30 or 40 mi. in Temple; W. S. Shipp, County Judge, Belton; amount available, \$600,000. (Lately noted as voting \$600,000 bonds.)

Tex., Belton.—Road Dist. No. 4 of Bell county will build roads in Tal-Coe-Temple Heights, addition to Temple, Tex.; W. S. Shipp, County Judge. (Lately noted as voting \$15,000 bonds.)

Tex., Bonham.—Good Roads Dist. No. 1 of Fannin county defeated \$300,000 bonds to construct roads; Rosser Thomas, County Judge. (Lately noted.)

Tex., Bryan.—City votes Apr. 7 on \$12,000 bonds for street paving. Address The Mayor.

Tex., Cameron.—Road Dist. No. 6 of Milam County votes Feb. 21 on \$100,000 bonds for road improvements. Address County Commissioners.

Tex., Clarksville.—Red River county votes Feb. 21 on \$200,000 bonds to improve roads. Address County Commrs.

Tex., Corsicana.—City, J. A. Harper, Secy., is asking bids on 24,251 sq. yds. street paving, with concrete curbs and gutters. (See Machinery Wanted.)

Tex., Cooper.—Precinct No. 1 of Delta County votes Mch. 7 on \$200,000 bonds for road improvements. Address County Commissioners.

Tex., Fort Worth.—City will improve about 2100 sq. yds. on College Ave., 4600 on Jennings and 2300 on Terrell; vitrified brick (vertical fiber), bitulithic, bituminous macadam or vibrolithic; bids until Feb. 3; F. J. Von Zuben, City Engr. (See Machinery Wanted.)

Tex., Groesbeck.—Limestone county will vote on \$150,000 bonds to construct roads. Address County Commrs.

Tex., Houston.—City will pave Lee St. from Hardy to Clark Sts.; cost \$9500; E. E. Sands, City Engr.; bids until Jan. 31. (See Machinery Wanted.)

Tex., Houston.—City let following contracts for street paving: Rock Asphalt Co., McKinney Ave., Main to Velasco Sts.; Westrumite Co., Preston Ave., bridge to Washington Ave.; Bureka Construction Co., Preston Ave., Main to Travis and Milam to Brazos Sts., wood blocks.

Tex., Houston.—City Council adopted resolutions ordering E. E. Sands, City Engr., to prepare plans and specifications for paving 35 streets in business district, including Austin St., Capitol Ave., Walker Ave., etc.

Tex., Lufkin.—City asking bids for previously-noted paving on 1st St., streets around city park and Lufkin Ave.; about 2300 cu. yds. excavation, 3800 lin. ft. curb and gutters and 9930 sq. yds. paving; P. A. McCarthy & Sons, Engrs. (See Machinery Wanted.)

Tex., Marshall.—Harrison county votes Feb. 24 on \$300,000 bonds to construct macadam or gravel roads; Geo. L. Huffman, County Judge. (Lately noted.)

Tex., McKinney.—Road Dist. No. 4, Collin county, contemplates road construction in spring; \$450,000 authorized; H. L. Davis, County Judge. (Previously noted, partially incorrectly, as "Dist. No. 1.")

Tex., Refugio.—Refugio county is proceeding with construction of 18 mi. graded earth roads; amount available \$25,000; E. S. Windsor, Refugio, Engr.; contract let to Holstein & Mullen.

Tex., Pecos.—Road Dist. No. 1 of Reeves county voted \$100,000 bonds to construct roads. Jas. Camp, Kemp Harrison and others appointed Road Board. (Lately noted.)

Va., Culpeper.—Culpeper County Commrs.,

W. E. Coons, Clerk, report contracts are progressing on road construction; Stevensburg Magisterial Dist. voted \$45,000 and Catalpa Magisterial Dist. \$120,000 bonds.

W. Va., Parkersburg.—Williams Dist. of Wood county (including Williamstown) is reported as considering voting on \$120,000 bonds to improve roads. Address County Commrs.

W. Va., White Sulphur Springs.—Greenbrier county and corporation owning White Sulphur Springs will improve turnpike from Virginia State line to Greenbrier River Bridge at Caldwell, W. Va. Address County Commrs.

SEWER CONSTRUCTION

Ark., Ashdown.—City Council passed ordinance creating sewer and water district; J. R. Bowles, H. L. Toland and J. M. Johnson, Commrs.

Ark., Forrest City.—City will construct sewer system in Fussell Addition, comprising 10 blocks. Address The Mayor.

Fla., De Land.—James N. Hazlehurst, Const. Engr., Atlanta, Ga., prepared preliminary estimate of cost of constructing sewer system to drain about 300 acres of main portion of town and of grading and paving streets. (See Road and Street Work.)

Fla., St. Petersburg.—City will construct sewers in Bon Air and Pomona Heights subdivisions; estimated cost, \$3615; M. W. Spencer, City Engr.

Ga., Brunswick.—Board of Public Works will install 4000 ft. 4-in., 7000 ft. 8-in., 300 ft. 10-in., 450 ft. 12-in. and 200 ft. 15-in. first-class salt-glazed vitrified sewer pipe with necessary Y and T branches; also 35,000 hard-burned brick and 60 bbls. Portland cement; bids until Feb. 10; J. L. Zachry, City Engr.; lately noted to extend sewer system. (See Machinery Wanted.)

Md., Baltimore.—Board of Awards, John Hubert, Acting Prest., will build sanitary sewers, contracts Nos. 125, 127 and 129; contract No. 125 requires 5525 lin. ft. 38 in. and 370 lin. ft. 33 in. diameter sewers, 15,685 cu. yds. earth excavation, 690 cu. yds. rock excavation and 4000 lin. ft. pipes; contract No. 127, 1937 lin. ft. 33 in. and 3464 lin. ft. 27 in. diameter sewers, 6307 cu. yds. earth excavation, 752 cu. yds. rock excavation and 1000 lin. ft. pipes; contract No. 129, 20,250 lin. ft. 8 to 10 in. sewers, 12,050 lin. ft. house connections; bids until Feb. 4; plans and specifications at office of Calvin W. Hendrick, Ch. Engr. Sewerage Com.; specifications at office Sewerage Com., 904 American Bldg. (See Machinery Wanted.)

Md., Baltimore.—City let contract Jas. Ferry & Son, 2111 Madison Ave., at \$742.50 to construct sanitary sewers, contract No. 34; McCarthy & O'Herron, 14 W. Oliver St., at \$138,637.50, lateral sanitary sewers, contract No. 128; Sam T. Williams, 223 N. Calvert St., at \$992, lateral sanitary sewers, contract No. 112. (Call for bids and further facts lately noted.)

Md., Baltimore.—City let contract Carrozza, Lavezza & Carrozza, 132 Dolphin St., at \$90,552 to construct sanitary lateral sewer, Contract No. 124. (Call for bids lately noted.)

Mo., Chillicothe.—City will lay 3300 ft. 12, 15 and 18-in. sewer pipe; reported to have opened bids Jan. 26; W. L. Wannaker, City Clerk.

Mo., Kansas City.—City let contract Williams & Samples, 1332 Grand Ave., Kansas City, at \$100,000 to construct vitrified pipe sewer at Centropolis; Curtis Hill, City Engr.

N. C., Dobson.—Surry county voted \$7000 sewer system bonds. W. S. Gough, Chmn. Board of County Commrs.

N. C., Sylva.—Town contemplates issuing \$30,000 to \$50,000 bonds for sewer system, water-works, paving and sidewalks. Address Town Clerk.

Tenn., Cleveland.—City is issuing \$75,000 bonds for proposed sewer construction; T. E. Hatch, Mayor. (Previously noted.)

Tex., Fort Worth.—City asks bids until Feb. 3 for about 900 ft. vitrified storm sewer, Jennings Ave. and 10th Sts.; F. J. Von Zuben, City Engr. (See Road and Street Work.)

Tex., Houston.—City let contract E. M. Scheffow sanitary sewer connections on streets to be paved, and F. G. Horton & Son, at \$3534.50, sanitary sewer on Houston Ave., Payne to N. Main St.

Tex., Post City.—R. E. Gilmore, Archt., Box 417, has plans for septic tank or sewerage-disposal plant for several business blocks; cost \$1000; brick and concrete. (See Machinery Wanted.)

Tex., San Antonio.—City let contract Chas. Schrimm at \$3762 to extend storm sewers on E. Commerce St.; 4753 ft.; also let contract

Rushmere & Gowdy to construct sanitary sewers; plans by Sam M. Gray, Providence, R. I. (Previously noted.)

Tex., Waco.—City asks bids until Jan. 30 for construction of sanitary sewer laterals to Brazos River sanitary sewer main; about 1000 lin. ft. 10-in., 1600 ft. 8-in. and 2000 ft. 6-in. vitrified sewer pipe in place, with specials, excavations, etc.; G. E. Byars, City Engr.

TELEPHONE SYSTEMS

Ky., Glasgow.—Barren & Monroe County Telephone Co., capital \$3500, incorporated by W. H. Taylor, C. B. Miller and L. C. Griffiths.

Miss., Amory.—St. Louis & San Francisco R. R. F. G. Jonah, Ch. Engr., St. Louis, is reported to extend telephone system from Amory to Memphis, Tenn.; new line to be 125 mi. long and cover entire southeastern district.

Okla., Clinton.—German-American Mutual Telephone Co. Incptd. by J. A. H. Werning, J. B. Thompson and W. E. Boen.

S. C., Ehrhardt.—Ehrhardt Telephone Co. Incptd. by J. L. Copeland, S. W. Copeland and Jacob Ehrhardt.

Tenn., Columbia.—Citizens' Telephone Co., O. J. Porter, Gen. Mgr., purchased site 20x75 ft. on which to erect shop and warehouse buildings.

Tex., Dallas.—Southwestern Telephone & Telegraph Co. will erect exchange at 9th St. and Zang's Blvd., Oak Cliff; 2 stories and basement; fireproof; estimated cost \$100,000; let contract. (Previously noted.)

Tex., Temple.—Southwestern Telephone & Telegraph Co. (main office, Dallas) appropriated \$15,000 to be expended during present year in underground conduit construction.

Va., Clifton Forge.—Clifton Forge Mutual Telephone Co. increased capital from \$5000 to \$50,000.

W. Va., Sandyville.—Citizens' Telephone Co., capital stock \$5000, Incptd. by S. K. Semerville, Dempsey Dawkins, L. Owens and others.

TEXTILE MILLS

Ga., Quitman.—Cotton Yarn.—Quitman Mfg. Co., capital stock \$100,000, being organized by S. M. Turner, S. S. Rountree, E. J. Young, G. M. Spain and others; acquire Atlantic & Gulf Mills, equipped with 10,000 ring spindles, 2500 twister spindles, etc.

La., New Orleans.—Hosiery.—Alden Mills increased capital stock from \$200,000 to \$500,000.

Miss., Wesson.—Cotton and Wollen Goods. Wesson Operating Co. Incptd.; S. Odenthaler, Prest.; I. Marx, V.-P.; John H. Hickory, Secy.; E. Marx, Treas.; all of New Orleans, La.; acquire Mississippi Mills.

N. C., Asheville.—Bed Spreads.—French Broad Mfg. Co. contemplates installing 8 looms, but has not perfected plans. (Lately noted having ordered 8 looms and contemplating 32 additional.)

N. C., Central Falls.—Cotton Goods.—Central Falls Mills, capital stock \$100,000, incorporated by H. L. Caveness and J. M. Caveness of Cole Ridge, N. C.; J. B. Stroud of Greensboro and others; acquire Wroul Mfg. Co. mills.

N. C., Connelly Springs.—Hosiery.—Connelly Springs Knitting Mill Co. organized; D. B. Mull, Prest., Secy. and Treas.; W. T. McCalliard, V.-P.; has \$4000 brick building, 124x34 ft.; also 60 knitters, dyeing equipment, finishing department, etc., costing about \$8000; daily capacity 250 doz. prs. hosiery; steam power; in about 60 days will begin construction hydro-electric plant and transmission system, costing about \$6000, on South Fork River, 4 mi. distant. (Previously noted Incptd.)

N. C., East Dunham.—Knit Goods.—Louise Knitting Mill, capital stock \$50,000, Incptd. by J. H. Stone, W. T. Cole, T. H. Allison and others.

N. C., High Point.—Cotton Cloth.—Pickett Cotton Mills considering adding 30,000 or 35,000 spindles; decide within few months; has 12,000 spindles, 300 looms, etc. (Previously reported as to add these spindles.)

N. C., Kannapolis.—Patterson Mfg. Co. will build 2-story 200x55-ft. addition for spinning machinery; now has 21,120 ring spindles, 400 broad looms, etc., driven by electric power.

N. C., Kings Mountain.—Cotton Yarn.—Cora Cotton Mills will add 5000 spindles, carding machinery, etc.; has let contract. (Lately reported.)

Tenn., Rogersville.—Hosiery.—Oscar Herman, Cleveland, O., Hugh G. Kyle and others, Rogersville, plan organizing \$50,000 company to establish hosiery mill. (Lately noted.)

Va., Graham.—Woolen Goods.—J. M. Newton is corresponding relative to location of woolen mill.

W. Va., Parkersburg.—Woolen Goods.—International Woolen Mills Co., capital stock \$500,000, incptd. by Geo. W. Strong, Jas. A. Ryan and others.

WATER-POWER DEVELOPMENTS

Ga., Eatonton.—Putnam Mills & Power Co. accepted surveys for construction of concrete dam at plant on Little River near site of present dam at Little River ford; has submitted specifications to contractors for bids.

Ky., Cadiz.—George L. Smith, Gen. Mgr. Cadiz Water Co., advises: Will use electricity from completed hydro-electric plant of A. P. White & Co.; install 3 to 4 ml. Nos. 6 and 8 copper wire, with poles, crossarms, switchboard, transformers, etc. (Lately noted to install electric plant.)

Ky., Central City.—Judge Dalton and Dr. Netherlands of Louisville are reported as proposing to construct hydro-electric plant costing \$3,000,000.

N. C., Connelly Springs.—Connelly Springs Knitting Mill Co. will build hydro-electric plant and transmission system on South Fork River, 4 ml. distant; cost about \$600 to complete; begin construction in about 60 days.

WATER-WORKS

Ark., Ashdown.—City Council passed ordinance creating water and sewer district; J. R. Bowles, H. L. Toland and J. M. Johnson, Commrs.

Fla., Arlington Heights.—C. C. Tracey, 311 Masonic Temple, Jacksonville, let contract J. F. Zetsche, Jacksonville, to construct water-works and electric-light plant. (Lately noted.)

Ga., Tallapoosa.—City will lay about 4000 additional feet water mains and place 5 more hydrants. Address The Mayor.

Ky., Carlisle.—Arthur Marshall Morgan submitted plans and specifications for city water-works; impounding reservoir to cover 7½ acres and have drainage of 2½ acres; capacity 20,000,000 gals.; water to be impounded by earth dam with concrete core; dam 400 ft. long, 100 ft. in thickness at base, 25 ft. at top and 20 ft. high; pumping station and 2 pumps; steel tank with capacity 60,000 gals.; tank to be 90 ft. from ground to base of tank and tank proper 22 ft. high; 23 fire hydrants; mains 10, 8 and 6 in.; receive bids for construction until Feb. 2; proposal forms on file with Arthur Marshall Morgan at Chicago and with City Clerk at Carlisle. (Lately noted.)

Ky., Hardin.—City will install complete water-works and light plant for 1000 population; bids asked; L. C. Stark, Mayor. (See Machinery Wanted.)

Ky., Lexington.—Lexington Hydraulic & Mfg. Co. purchased 31 acres land about 5 ml. from city for \$10,000; will utilize in proposed extensions of water-supply facilities.

La., Ville Platte.—City (lately noted as issuing bonds), A. A. Laverne, Mayor, will install water-works to cost \$20,000; tank and pipe; motor-driven turbine pump; 40,000-gal. concrete reservoir; W. B. Robert, Engr., Opelousas, La.; open construction bids Feb. 12; use power and well of ice factory. (See Machinery Wanted.)

Miss., Flora.—City voted \$10,000 bonds to construct water-works. Address The Mayor.

N. C., Dobson.—Surry county voted \$33,000 water-works bonds; W. S. Gough, Chmn. Board of County Commrs.

N. C., Sylva.—Town contemplates issuing \$30,000 to \$50,000 bonds for water-works, sewer system, paving and sidewalks. Address Town Clerk.

Okla., Buffalo.—City is reported as considering construction of water-works to cost \$50,000. Address The Mayor.

Okla., Vallant.—City let contract Davis & Baum, Caddo, Okla., at \$32,700 to construct water-works; \$36,000 bonds; E. W. Gantt, Consit. Engr., Sam Houston Life Bldg., Dallas, Tex.

S. C., Camden.—City let general construction contract to Tucker & Laxton, Charlotte, N. C., at \$61,976.50 for water-works and sewer system; water to be secured from Dickey's Creek; purchased 400 acres to protect watershed; concrete filter plant of 1,000,000 gals. capacity; 250,000-gal. steel standpipe on Jumelle Hill; pressure of 85 lbs. in business district; 215 electric lamps of 100 C. P. each; lamps of nitrogen-tungsten type; let other contracts for pipe lines, etc.; \$125,000 bonds voted; plans and specifications by Gilbert C. White, Engr., Charlotte, N. C.; materials supplied. (Previously noted.)

S. C., Columbia.—City asks bids until Feb. 3 to construct water mains in North Columbia, Shandon and Waverly; about 11,657 ft. 6-in., 7981 ft. 8-in., 380 ft. 10-in. and 1432 ft. 12-in. pipe, 71 valves and 37 fire hydrants; F. C. Wyse, Engr.-Supt. (See Machinery Wanted.)

Tenn., Jackson.—City voted \$35,000 bonds to extend water mains. C. E. Griffin, Mayor. (Lately noted.)

Tex., El Paso.—City will install water-works machinery, including steam-driven air compressors, plunger pumps, water-tube boilers, surface condenser, power and centrifugal pumps; bids until Feb. 12; C. W. Fassett, City Clerk; F. H. Todd, Consult. Engr. (See Machinery Wanted.)

Tex., Seguin.—City votes Feb. 19 on \$20,000 bonds, of which \$12,500 will be expended to improve water and light plants and \$7500 toward payment of water-works bonds. Address The Mayor. (Lately noted.)

Va., Vinton.—Town has contracted with Vinton-Roanoke Water Co. to purchase all equipment, pipes, hydrants, etc., for about \$18,000; until other arrangements can be made, town will purchase water from company; bonds available; J. H. Scott, Mayor. (Previously noted.)

W. Va., Kingwood.—Kingwood Water Co., Moundsville, W. Va., will construct 150,000-gal. steel standpipe costing \$2000 and frame machine-house costing \$600; install 20,000 ft. pipe and fittings; no construction bids asked; materials and machinery ordered except cast-iron pipe; address proposals to Mentor Hetzer; lately noted incptd., \$25,000 capital stock, by Mentor Hetzer and others. (See Machinery Wanted.)

WOODWORKING PLANTS

Ala., Bridgeport.—Package Handles.—Benbow Mfg. Co. will establish lately noted factory for package handles; E. B. Benbow, Prest.; Arthur Hensel, V.-P.; J. L. Benbow, Secy. (all of Chicago); John Morrow, Treas.; erect 42x177 ft. building, with 36x49-ft. boiler-room; mill construction; no contract; install machinery. (See Machinery Wanted.)

Ala., Russellville.—Poles.—Richardson Lumber Co. will build plant to mfr. cedar poles.

Ark., Little Rock.—Interior Finishings.—Sandberry Interior Finish Co., capital \$15,000, incptd.; Algot Sandberry, Prest.; Axel Williams, V.-P.; R. T. Bryson, Secy.-Treas.

Ark., Paragould.—Furniture.—People's Furniture Co., capital \$10,000, incptd.; G. L. Adams, Prest.

Fla., Jacksonville.—Boxes.—Besser Patent Box Co., capital stock \$100,000, incptd.; will build plant to manufacture patented cigar boxes; weekly capacity about 10,000 boxes; Jacob Besser, Prest.-Treas.; J. Abraham Rosen, V.-P. and Gen. Mgr.; R. L. Hay, Secy.

Fla., Jacksonville.—Boxes.—Jacksonville Box Co. is reported to establish plant.

Fla., Tampa.—Caskets.—Tampa Casket Co., capital stock \$15,000, incptd.; J. W. Crosby, Prest.; L. V. Crosby, V.-P.; M. P. Mickler, Secy.

La., Alexandria.—Hoops.—Creston Hoop Mfg. Co., J. M. Peel Prest., purchased 10 acres on which to build factory with daily capacity 100,000 hoops.

La., Kenner.—Boat Oars, Shuttle Blocks, etc.—Anchor Sawmills Co. will build plant to mfr. boat oars, shuttle blocks, dimension stock, etc.; will install some new machinery, but will transfer larger part of equipment from another mill of company; float logs down Mississippi River.

La., New Orleans.—Coffins.—N. E. Shriver leased 4-story warehouse at 423-424 Canal St. and will remodel to manufacture coffins; electric elevators; steam heat; later proposes erecting plant.

La., Shreveport.—Staves.—Louis Werner Stave Co., capital stock \$500,000, incptd.; Louis Werner, Prest., St. Louis; B. A. Kohler, V.-P. and Mgr.; R. Latzko, Secy.; both of Shreveport; mfr. white staves for export, principally to France.

Md., Baltimore.—Millwork.—Morgan Millwork Co., Howard and West Sts., has plans by J. E. Laferty, 11 E. Pleasant St., for mill building on North Ave.; 5 stories; brick; 124x160 ft.

Miss., Beaumont.—Veneer.—J. H. Overstreet and Jeff Griffiths will build veneer plant.

Mo., Kansas City.—Boxes.—Forrester-Nace Box Co. increased capital stock from \$30,000 to \$100,000 to increase capacity of plant.

N. C., High Point.—Furniture.—Continental Furniture Co. is reported to enlarge plant; add 8000 sq. ft. floor space.

N. C., Lincolnton.—Furniture.—Lincolnton Furniture Mfg. Co., D. E. Rhyne, Prest., opens proposals June 1 on 2 buildings 14x70 ft., and patent drykiln; ordinary mill construction; Mgr. M. W. Shook, Lenoir, Constr. Engr. (Lately noted incptd., \$50,000 capital stock, with plans for buildings and machinery to cost about \$30,000, having capacity about 3 cars furniture weekly.)

S. C., Greenwood.—Furniture.—Greenwood Furniture Co., capital \$10,000, incptd. by H. A. Graham and M. M. Weller.

Tenn., Harriman.—Staves and Heading.—Cumberland Stave & Heading Co., Livingston, Tenn., is reported to build plant; issue \$25,000 first preferred stock.

Tenn., Nashville.—Woodenware.—Southern Woodenware Co., capital stock \$50,000, incptd. by D. W. Cantrell, Prest.; J. W. Mason, Secy.

Va., Drakes Branch.—Shuttle Blocks.—Payne & Spindler will build plant to utilize hardwoods; probably mfr. shuttle blocks.

Va., Roanoke.—Shipping Cases, Handles, etc.—Garrett Mfg. Co. (J. P. Garrett), Salem, Va., purchased Crescent Box & Lumber Co.'s plant for \$20,000; plans to erect drykilns and mill buildings and install additional machinery; also install equipment to manufacture hickory handles.

FIRE DAMAGE

Ala., Birmingham.—J. H. Johnston's dwelling 1641 12th Ave. South; loss \$7500.

Ala., Coffee Springs.—Coffee Springs cotton ginney and seedhouse.

Ala., Dadeville.—Pitts Building and buildings of Ingram-Howie Hardware Co., Leach-Pogue Co., Miller & Lovelace; loss \$50,000.

Ala., Epes.—Lovenam Compress Co.'s plant, owned by Victor Hugo Friedman of Tuscaloosa; estimated loss \$100,000.

Ala., Eufaula.—Covey Cottonseed Oil Co.'s gin; estimated loss, \$8000.

Ala., Opelika.—W. M. Ray's steam laundry on North St.; estimated loss, \$2000.

Ark., Little Rock.—Falk Millinery Co.'s store, building owned by Herman Kahn; loss \$50,000.

Ark., Obeare.—Rice warehouse, owned by J. L. Burns of Jonesboro.

Ark., Roy.—Kess Stuart's store; loss \$4500.

Ark., Warren.—M. R. Moseley's residence at Parnell Springs; loss \$3000.

Fla., Anna Maria.—J. E. McIntosh's apartment-house; loss \$4000.

Fla., Gainesville.—L. C. Smith's store, Law Exchange Bldg., owned by J. J. Hymans; loss \$5000.

Fla., Jacksonville.—Buildings owned by W. D. Gamble & Bro. and occupied by Fleece & Gray and Padgett & Huey.

Fla., Kenwood.—Kenwood Hotel and residence and office of manager of company; total loss \$6500.

Fla., Mineola.—Lakeview Hotel; loss \$10,000.

Fla., Oviedo.—Buildings of H. B. McCall, W. H. Howard, J. B. Jones, L. T. Hunt, E. Wilson, T. Aulin and B. F. Wheeler.

Ga., Augusta.—Warehouse occupied by Industrial Lumber Co., owned by J. H. Hankinson; loss \$40,000.

Ga., Swainsboro.—Coleman Opera-house and office building; loss \$100,000.

Ga., Cedartown.—G. G. Adams' residence, occupied by E. A. King.

Ky., Dorton.—Samuel Adams' store and residence; loss \$6000.

Ky., Highland Park.—Residences of Mrs. John McDonald, Alexander McGuire and Ernest Hollis; loss \$6000.

Ky., Louisville.—A. T. Crawford's residence at 4604 S. 2d St., Beechmont; loss \$12,000.

Ky., Louisville.—H. A. Bohn's screen manufacturing plant at 1008-1010 E. Broadway; loss about \$5000.

Ky., Paris.—Columbia Theater, owned by I. O. O. F.; loss \$5000.

Ky., Paris.—Hugh Campbell's residence on Jacktown Pike; loss \$3000.

La., Berwick.—Pease-Gilmore Column Co.'s plant; loss \$30,000.

La., Crowley.—J. B. Thompson's building; loss \$4000.

La., Folsom.—Folsom Lumber Co.'s drykiln; loss \$5000.

Md., Gaithersburg.—Edgar Shipley's store and dwelling; loss \$8000.

Md., Gaithersburg.—I. T. Fulk's dwelling, not Thos. I. Fulk, as lately reported.

Md., Baltimore.—Patterson Building, 500-12 E. Baltimore St., occupied by M. V. Murphy,

Half Price Hat Store, Deetjen Postcard & Novelty Co. and others; loss to building and stock \$10,000.

Miss., Hermanville.—J. G. Millsap Mercantile Co.'s store and warehouse; Wm. G. Thomas' store; Short & Pittman's store; Hermanville Bank; C. B. Flowers' store; Masonic Temple; Farmers' Union's building; Yazoo & Mississippi Valley R. R.'s depot and pumping-house; Mr. Shields' residence; Mr. Herrington's residence; total loss about \$75,000.

Miss., Laurel.—Union Hotel, J. Kimbell, Mgr.; loss \$11,000.

Miss., Schlater.—D. C. Anderson's residence; loss \$3000.

Miss., Vicksburg.—S. Spengler's planing mills at Glass Bayou, on North Washington St.; estimated loss \$40,000.

Mo., Kansas City.—Boston Furniture Co.'s store at 1302 Grand Ave.; loss \$15,000 to \$20,000.

Mo., Monroe City.—McFarland Bros.' flour mill; loss about \$30,000.

Mo., Rich Hill.—Building owned by Mrs. Silas Wright of Columbus, Kans., and occupied by J. W. Dixon.

Mo., St. Louis.—L. McD. Navin's building at 2529-33 La Salle St., occupied by America Shoe Stock Co.

N. C., Louisburg.—Leonard Bros.' sawmill near Mapleview, 5 ml. from Louisburg; loss about \$1000.

N. C., Spencer Mountain (not a P. O.).—Spencer Mountain Stone & Brick Co.'s plant; offices in Charlotte; estimated loss, \$20,000.

N. C., Troy.—Graded School, address School Trustees; Methodist Episcopal Church, address The Pastor.

Okla., Glencoe.—Conart & Bethard's store; Ed V. Reeser's hotel; loss \$5000.

Okla., Hastings.—Caden Opera-house and two store buildings; loss \$25,000.

S. C., Columbia.—J. W. Wessinger's two buildings, occupied by Stallings & Armstrong and Q. M. Gayden, at Brookland.

S. C., Bennettsville.—J. J. Matheson's barn; loss \$5000.

S. C., Chester.—Loomis Bldg. at Brainerd Institute; loss \$3000.

Tenn., Buford.—Store occupied by Paulk & Sons, owned by Parsons Bros.; loss \$6000.

Tenn., Memphis.—E. W. Trout & Co.'s warehouse and 4000 bales of cotton; loss on building, owned by Wm. Dockery, \$10,000.

Tenn., Woodbury.—Cason & Hawes' store, loss \$3000; John Stone's store, dwelling and office; Jno. B. Kirk's store and barber shop; Prestley Lester's store, loss \$5500; Dr. B. P. Lester's office; Cumberland Telephone Co.'s offices, building owned by W. W. Gray.

Tenn., Oliver Springs.—Sam Hughes' residence; loss several thousand dollars.

Tenn., Paris.—American French Perfumery Co.'s plant; loss \$30,000.

Tenn., Shelbyville.—Wm. Bates' building, loss \$3000; Dr. S. J. McGrew's 3 buildings, loss \$3000; Ray B. Jean's building, loss \$1500.

Tenn., Troy.—H. C. Bennett's store; Seacore & Hughes' stable; G. R. McDade's 2 stores; loss \$5000.

Tex., Blair.—S. E. Adcock's store; loss \$4000.

Tex., Brownsville.—Diario de Frontera printing plant; loss about \$7000.

Tex., Detroit.—F. D. Inzer's residence; loss \$5000 to \$7000.

Tex., Fort Worth.—Trinity Compress Co.'s plant; estimated loss, \$50,000.

Tex., Jordanton.—Residence of R. L. Witt, V.-P. Atascosa County State Bank; loss \$5500.

Tex., Texarkana.—Texarkana Brick Co.'s plant; loss \$6000.

Tex., Yoakum.—S. H. Hood's residence; loss \$10,000.

Tex., Valentine.—Depot of Galveston, Harrisburg & San Antonio Ry., D. K. Colburn, Asst. Gen. Mgr., Houston, Tex.

Va., Danville.—Mrs. S. P. Watkins' residence; Mr. Kinnsey's residence.

Va., Barcroft.—W. E. Clark's residence, barn and outbuildings.

Va., Charlottesville.—Cottage owned by Misses C. W. and Edmonia Berkeley and Mrs. Fannie C. Williams; loss \$3500.

Va., Fredericksburg.—Jacob Goldsmith's residence; loss \$8000.

Va., Norfolk.—Geo. W. Duvall Co.'s pier, occupied by People's Navigation Co.; estimated loss, \$18,000.

Va., Woodbridge.—Corbin Thompson's barns; loss \$7000.

W. Va., Boomer.—Boomer Coal & Coke Co.'s tipple; loss about \$80,000.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Ala., Gadsden.—A. Bloch will erect double brick flat on W. Gadsden St.; also erect 7-room cottage; cost \$7000.

D. C., Washington.—J. W. Gregg, 610 O St. N. W., is receiving sub-bids to remodel apartment-house at 1626 12th St. N. W.; 4 stories; cost \$10,000; N. G. Grimm, Archt., Bond Bldg., Washington.

Fla., Anna Maria.—J. E. McIntosh will probably rebuild apartment-house reported burned at loss of \$4000.

Fla., Jacksonville.—Julian Prewitt will erect 2-story brick apartment-house on 2d St. near Market St.; cost \$8000.

Fla., Jacksonville.—O. T. Kimball, 921 E. 12th St., will erect apartment and store building. (See Stores.)

Mo., St. Louis.—A. Naert will erect 7 tenements at 5935 to 5955 Louisiana St. and at 622 Louisiana St.; 2 stories; cost \$27,400.

Mo., St. Louis.—Joseph Gramlig will erect tenement-house at 5932 Hamilton Terrace; 2 stories; cost \$3500; construction by owner.

Mo., St. Louis.—F. L. Dittmeier will erect four 2-story flats at 4526-32 Pennsylvania Ave.; cost \$12,000.

Mo., St. Louis.—Philip Bauer will erect 2-story flats at 3720-22 Wisconsin Ave.; cost \$5000.

Mo., St. Louis.—Clemens Degenhardt will erect double flats on Lamp Ave.

Mo., St. Louis.—P. Sauerwein will erect 2-story flat at 3622 Michigan Ave.; cost \$3400.

Mo., St. Louis.—A. C. Heibel will erect 2-story flat at 3941 Shaw St.; cost \$5500.

Mo., St. Louis.—Agnes Mueller will erect two 2-story flats at 3341-47 Lafayette St.; cost \$13,000.

Mo., St. Louis.—C. E. Lind will erect 2-story brick tenement-house at 4027 Lexington Ave.; cost \$4300; construction by owner.

Mo., St. Louis.—United Building Co. will expend \$4000 to repair tenement-house at 6188 Berlin St.

N. C., Raleigh.—B. F. Montague will probably have plans prepared by J. M. Kennedy, Raleigh, for tenement-houses; 30x90 ft.; ordinary construction; slate, tile or other fireproof roof; cost \$3000 to \$4000 each; contract not let. (Lately noted under Dwellings as having let contract.)

Tenn., Chattanooga.—Realty Trust Co., J. S. Rodriguez, Prest., it is reported, will begin at once erection of building on 7th St.; 9 stories and roof garden; concrete frame reinforced with steel will support concrete floors; interior walls of hollow tile; exterior of lower floor of light glazed terra-cotta; exterior of upper floors of gray vitrified brick with terra-cotta trimmings; gray Tennessee marble base; 2 elevators; electric ventilation system; basement to contain heating plant and storage-rooms; building 110 ft. high; lower floor for offices of company; upper floors for apartments; cost \$100,000; R. H. Hunt, Archt., James Bldg., Chattanooga. (Previously noted.)

Tenn., Lebanon.—F. J. Sanders will erect 4 store buildings; apartments second floor.

Va., Richmond.—Virginia Realty & Construction Co. will erect 3 two-story brick apartments on Main St.; cost \$25,000.

ASSOCIATION AND FRATERNAL

Ark., Morrilton.—Y. M. C. A. appointed Mayor J. A. Frisby, V. V. Hellums and others committee to select site to erect \$4000 building.

N. C., Raleigh.—Grand Master M. L. Shipman and other members of I. O. O. F. are interested in erection of temple for Grand Lodge of Odd Fellows.

Tex., Beaumont.—Y. W. C. A. contemplates erecting association building.

Tex., Dallas.—B. P. O. E. has plans by H. A. Overbeck, Dallas, for lodge building; 2 stories and basement.

Va., Alexandria.—George Washington Memorial Assn. is reported considering erection of temple as memorial to George Washington.

Va., Fort Monroe.—Army Young Men's Christian Assn. is reported to expend \$35,000 for enlargement of building.

Va., Martinsville.—Piedmont Lodge, A. F. & A. M., will erect Masonic Temple; 40x75 ft.; cost \$12,500 to \$15,000; C. F. Womack, Chrmn. Building Com., states preliminary sketches are being asked. (Lately reported.)

W. Va., Clarksburg.—Y. M. C. A. inaugurated campaign for \$150,000 to erect fireproof building to cost \$100,000; plans not made. Address C. H. Harding.

W. Va., Huntington.—Huntington Trades and Labor Assembly, W. J. Murphy, Secy., 2953 5th Ave., will erect labor temple; cost (without mechanical equipment), \$75,000; steel, tile or metal roof; probably steam heat; electric elevator; architect not selected. (Lately noted.)

BANK AND OFFICE

Ala., Birmingham.—H. D. Breeding, 15 Watts Bldg., Birmingham, is reported to have prepared plans for office building; 10 stories; concrete construction; white terra-cotta facing; tile floors and marble wainscoting on first floor and hallways of other floors; steam heat; 2 passenger elevators; concrete slab room and ribbed-glass partition; estimated cost \$100,000.

Fla., Dade City.—Dade City Building and Loan Assn. organized with Wm. Redding Prest.; will erect building; 60x100 ft.; first floor for 2 stores and banking offices of First National Bank; upper floors for offices.

Ga., Atlanta.—Dr. J. R. Hopkins plans to erect 16-story professional building at Peachtree and Baker Sts.; Edw. Dougherty, Archt., Candler Bldg., Atlanta. Mr. Dougherty wires Manufacturers Record: "Plans not matured."

N. C., Danbury.—Bank of King Incptd. with \$25,000 capital by W. T. Grabs, S. W. Pulliam, E. P. Newsom and others; will erect bank building.

N. C., Hickory.—First National Bank, J. D. Elliott, Prest., has plans by J. M. McMichael, Charlotte, to remodel bank building; install burglar-proof vaults; cost \$25,000.

S. C., Florence.—Bank of Florence is reported considering plans by W. J. Wilkins & Co., Williamson Bldg., Florence, for bank building; 8 stories; steel; marble and ornamental brick front; estimated cost \$100,000.

S. C., Yorkville.—First National Bank will erect bank and office building.

Tenn., Chattanooga.—C. E. Buek acquired Temple Court Bldg. and is reported to remodel and enlarge; plans call for several additional stories, remodeling interior, etc.

Tenn., Chattanooga.—Realty Trust Co. is reported to begin at once erection of office and apartment building. (See Apartment-houses.)

Tex., Austin.—Geo. W. Littlefield will erect 2 additional stories to Littlefield Bldg. at 6th St. and Congress Ave.; cost about \$75,000.

Tex., El Paso.—Commercial Building Co., A. W. Bittick, Mgr., Commercial National Bank, will begin about May 1 to erect bank and office building; 50x86 ft.; 12 stories; fireproof; cost (without mechanical equipment), \$150,000; cost of heating plant, \$12,000; elevators, about \$17,000; O. H. Thorman, Archt., 417 Robert Bonner Bldg., El Paso. (Lately noted.)

Tex., San Marcos.—J. M. Cape will erect office and store building; 78x89 ft.; cost (without mechanical equipment) \$25,000; fireproof; gravel roof; steam heat; plans by and contract to Walsh & Burney. (See Machinery Wanted.)

Va., Franklin.—Merchants & Farmers' Bank purchased Virginian Hotel Bldg. and is reported to remodel portion for banking offices.

Va., Roanoke.—Lawrence Davis and J. B. Botts are reported to erect office building to be occupied by Southern Express Co.; 2 stories; brick; cost \$8000.

Va., West Point.—State Bank of West Point is reported to erect bank building at 8th and D Sts.

W. Va., Wheeling.—National Bank of West Virginia is reported to erect building; 10 stories; 47x60 ft.; fireproof; lower floor for banking quarters; upper floors for offices; construction probably to begin in summer and completion by Dec. 1915; C. W. Bates, Archt., Board of Trade Bldg., Wheeling.

CHURCHES

Ala., Sylacauga.—First Baptist Church, Rev. Leon M. Latimer, pastor, has plans by J. E. Green, 1906 American Trust Bldg., Birmingham, Ala., for building; gray or buff pressed brick; hot-air heat; roller partitions; cost \$16,000 to \$20,000. (Lately noted.)

Ala., Tuscaloosa.—First Methodist Church

will erect edifice; pressed brick and stone; seating capacity of main auditorium, 700 to 800; of Sunday-school, 550; cost \$45,000; R. H. Hunt, Archt., Chattanooga, Tenn. (Lately noted.)

D. C., Washington.—Kendall Baptist Church, Rev. Theron Outwater, pastor, 1312 B St. S. W., is having plans prepared by Speiden & Speiden, 1403 New York Ave. N. W., Washington, to remodel building to provide additional Sunday-school rooms; plans call for construction of galleries on 3 sides above auditorium, equipped with rolling partitions to permit converting same into about 20 classrooms, erection of addition in rear for pastor's study, baptistry, etc.; new heating and lighting systems and \$5000 pipe organ; total cost \$15,000.

Ga., Augusta.—Cumming Street Synagogue, A. Silver, Chrmn. of Bldg. Com., is having plans prepared by G. Lloyd Preacher, Augusta, for synagogue at 1007 Telfair St.; cost \$12,000.

Ky., Louisville.—James Lee Memorial Presbyterian Church will erect building at 1739 Frankfort Ave.; 62x100 ft.; brick; cost \$20,000. Address The Pastor.

Md., Govans.—First English Lutheran Church will erect building at Harwood Ave. and York Rd. Address The Pastor.

Md., Hagerstown.—First Brethren Church appointed committee to secure architect for building. Address The Pastor.

N. C., Charlotte.—Methodist Church plans erection of building in Elizabeth-Myers Park section; Rev. Plato Durham, Presiding Elder.

N. C., Charlotte.—St. Mark's Lutheran Church, Rev. R. L. Patterson, pastor, will erect Sunday-school building and parish-house.

N. C., Greensboro.—Church of the Covenant, Rev. R. Murphy Williams, pastor, it is reported, will erect building to cost \$25,000; J. G. Foushee, W. L. Clement, C. J. Brockman and others, Comm.

N. C., Reidsville.—Episcopal Church will erect building; brick veneer; steam heat. Address The Rector.

N. C., Lexington.—Holly Grove Lutheran Church, Rev. J. W. Senter, pastor, is having plans prepared by H. E. Bonitz, Wilmington, N. C., for building; cost \$10,000.

Okla., Durant.—First Presbyterian Church, Robt. A. Lively, member of building committee, is having plans prepared for building; cost \$20,000. (Lately noted.)

S. C., Jonesville.—Methodist congregation, Rev. J. A. Cook, pastor, contemplates erecting building in early spring; cost \$5000; plans not made. Address J. F. Alman, Chrmn. of Com.

Tenn., Cleveland.—Baptist church, J. D. Barnes, Chrmn. Building Com., will expend \$25,000 (cost without mechanical equipment) to erect building; 81x120 ft.; ordinary construction; slate roof; hot-air heat; electric lighting; cement sidewalks; Albert B. Baumann (successors to Baumann Bros.), Archt., Knoxville; date of opening bids not set. (Lately noted.)

Tenn., Nashville.—West End Methodist Church, Frank Washburn, Chrmn. Building Com., is having plans prepared for Sunday-school room arranged with view to erecting church auditorium to it in future.

Tex., Austin.—First Baptist Church, Rev. W. A. Hamlett, Pastor, has tentative plans by Roy L. Thomas, Austin, for building on site of present structure at 10th and Colorado Sts.; seating capacity about 1800; cost between \$40,000 and \$60,000.

Tex., Beaumont.—St. Mark's Episcopal Church will erect brick church, parish-house and rectory. Address The Pastor.

Tex., Marlin.—Catholic Church will erect \$15,000 building; Father C. Welsnerowski is interested.

Tex., Hondo.—First Baptist Church has plans by J. M. Hyde, Brenham, Tex., for building; face brick; stone trimmings; metal tile roof; steel ceiling; art glass; plate-glass baptistry; cost \$12,000 to \$15,000. Address proposals to archt.

Va., Alexandria.—Second Baptist Church opens bids March 1 to erect building; 40x70 ft.; cost (without mechanical equipment), \$8000 to \$10,000; ordinary construction; tin roof; hot-water heat; electric lighting. Address proposals to Geo. K. Bender, 423 N. Alfred St. (Lately noted.)

Va., Portsmouth.—Central Methodist Episcopal Church is reported to expend \$12,000 for improvements, to include addition to Sunday-school room with frontage of 28 ft. and cost \$8000; install \$3000 heating system and other improvements to cost about \$2,000. Address The Pastor.

CITY AND COUNTY

Ala., Dothan.—City Hall.—City will have architects submit plans Feb. 9 for city hall; R. W. Lismby, Clerk. (Lately noted.)

Ala., Huntsville.—City Hall.—City has plans by Edgar B. Love, Birmingham, for city hall. (Lately noted.)

Ark., Harrison.—Jail.—Boone County Commissioners, W. S. Albright, Chrmn. of Bldg. Com., will erect fireproof jail; cost \$10,000. (Lately noted.)

Fla., Bartow.—Jail.—Polk County Commrs. have plans by Talley & Summer, Jacksonville, Fla., for jail and will receive bids until Mich. 3; probable cost \$50,000.

Fla., Fort Meade.—Jail.—Polk County Commissioners will erect jail and jailor's residence; former to cost \$50,000 to \$60,000.

Fla., Tampa.—City Hall.—City has plans by Bonfoey & Elliott, Tampa, for lately-noted city hall; practically two buildings with alley or courtyard through center, bridged on second floor; one section to contain municipal offices, other police department offices; three stories; tower, 50 ft. square, five stories high, surmounted with dome and clock 4 ft. square; Doric style architecture; limestone columns; granite base; terra-cotta cornice; copper dome; estimated cost, \$325,000. (See Machinery Wanted.)

Ga., Columbus.—Hospital.—City is having plans prepared by E. C. Wachendorf, Empire Bldg., Atlanta, for hospital at 8th Ave. and 17th St.; fireproof; elevators; cost \$50,000. (Lately noted.)

La., New Orleans.—Markets.—A. J. Ricks, Commr. of Public Finance, will expend \$70,000 to remodel St. Bernard and LeBreton Markets; improvements include screening new stalls, refrigerators, paving and plumbing; E. A. Christy, Archt. (Lately noted to receive bids until Jan. 28.)

Mo., Alton.—City Hall and Hosehouse.—City will vote in April on \$150,000 bonds for city hall and \$10,000 bonds for hosehouse. Address The Mayor.

Mo., Cartersville.—County.—Jasper county will vote Feb. 17 on \$75,000 bonds for county buildings. Address County Commrs.

Mo., Fayette.—Library.—Bldg. Com. has plans by B. C. Elliott, Mexico, Mo., for public library; 40x50 ft.; cost (without mechanical equipment) \$10,000; ordinary brick construction; asbestos or tile roof; heating and lighting not determined; bids opened about April 1; address proposals to L. D. West. (Lately noted.)

Mo., Springfield.—Infirmary.—Bldg. Com. for Clark County Infirmary is reported to receive bids until Feb. 10 to erect infirmary; R. C. Gotwald, Archt., Springfield.

N. C., Concord.—Jail.—Cabarrus county, L. A. Weddington, Chrmn. of Building Com., is having plans prepared by Leonard A. Belton, Augusta, Ga., for jail and courthouse addition; jail to be connected with courthouse by bridge; several rooms will be added and made fireproof; will install steam-heating plant to heat both buildings; slate roof; electric lights; total cost, \$35,000. (Lately noted to award contract in February.)

N. C., Sylva.—Public Buildings.—City contemplates voting on \$12,000 to \$15,000 bonds to buy site for public buildings. Address The Mayor.

S. C., Chester.—Jail.—Chester County Commrs. purchased site and will erect jail. (Lately noted.)

Tenn., Jackson.—City Hall.—City defeated \$20,000 bonds for city hall. Address The Mayor. (Lately noted.)

Tenn., Nashville.—Fire Station.—City will erect fire station in Eastland; 2 stories; brick; J. D. Alexander, Commr.

Tex., Beaumont.—Hospital.—Jefferson county contemplates calling another election to vote on \$140,000 bonds to erect hospital; address County Commrs. (Lately noted as defeating bonds.)

Tex., Cleburne.—Hospital.—Johnson county will vote in March on \$40,000 bonds to erect city hospital. Address County Commrs.

Tex., Hutchins.—Poor Farm.—Dallas County Commrs. receive bids until Feb. 14 to erect hospital; 2 stories; brick and concrete; wards to accommodate 36 patients; cost \$8000 to \$10,000; Woerner & Cole, Architects, Dallas. (Lately noted.)

Tex., Waco.—Fire Station.—City has plans by Ross & Cason, 1539 Amicable Bldg., for repairs to Central and West End fire stations; Thos. A. Caulfield, Finance Commr.

Va., Alexandria.—Fire Department.—City is having plans for Relief Hook & Ladder Co.'s building revised by E. C. Dunn, City Engr.; cost \$10,000.

Va., Roanoke.—Municipal Building.—City has plans by Frye & Chesterman, Davis-Stephenson Bldg., Roanoke, for \$250,000 courthouse and office building for which election will be held March 3 on \$150,000 bonds. (Late-ly noted.)

Va., Norfolk.—Armory.—City will erect Armory for Norfolk Light Artillery Blues at 45th St. and Myers Ave.; brick; stone trimmings; 2 stories; 91 ft. 2 in. by 146 ft. 2 in.; ground floor of concrete and will contain gun room, locker room, shower baths, etc.; cost \$27,000; B. F. Mitchell, Archt., Norfolk; Brown & Lehman, Asso. Archts. (Late-ly noted.)

COURTHOUSES

Ark., Hot Springs.—Garland County Commissioners accepted plans by Theo. M. Sanders, Little Rock, to remodel courthouse; cost \$40,000. (Previously noted.)

N. C., Concord.—Cabarrus county is having plans prepared by Leonard A. Bellonby, Augusta, Ga., for jail and courthouse addition. (See City and County.)

Va., Roanoke.—City has plans by Frye & Chesterman, Davis-Stephenson Bldg., Roanoke, for courthouse and office building. (See City and County.)

DWELLINGS

Ark., Little Rock.—John S. Braddock will erect one 1-story and one 2-story frame residences at 1105 W. 34th St. and 324 High St.; cost \$4200.

D. C., Washington.—Morgan Bros., 30th and P Sts. N. W., are reported to erect 16 bungalows in Takoma Park.

D. C., Washington.—J. D. McIntyre is having plans prepared by N. R. Grimm, Bond Bldg., Washington, for bungalow at 16th and Geranium Sts. N. W.; cost \$5000.

D. C., Washington.—Harry A. Kite, 1338 G St. N. W., will expend \$20,000 (cost without mechanical equipment) to erect 8 dwellings on Tennessee Ave. N. E.; 18x30 ft.; ordinary construction; slag roof; hot-air heat; gas lighting; cement sidewalks; A. E. Landvoigt, Archt., 1338 G St. N. W., Washington; construction by owners. (Late-ly noted.)

Fla., Clearwater.—J. B. Paine has plans by Lester Avery, Clearwater, for residence; 32x28 ft.; cost (without mechanical equipment) \$3600; frame; shingle roof; hot-air furnace to cost \$150; electric lighting; day labor. (Late-ly noted.)

Fla., Fort Myers.—W. P. Franklin will erect residence.

Fla., Jacksonville.—J. W. Hill will erect dwelling; 28x43 ft.; ordinary construction; metal roof; flue fireplaces; electric lighting; tile roof; cost (without mechanical equipment) \$3500. (Late-ly noted.)

Fla., Leesburg.—W. H. Gevedon opens bids in Feb. to erect dwelling; 6 rooms; ordinary construction; shingle roof; electric lighting. (Late-ly noted.)

Fla., Palatka.—Palatka Development Co. will erect several additional dwellings.

Fla., St. Petersburg.—Chas. R. Hall will erect 2 dwellings; cost \$4000.

Fla., Tampa.—W. H. Beckwith has plans by J. H. Ryno, successor to Barber & Ryno, Knoxville, Tenn., for \$29,000 dwelling.

Ga., Atlanta.—P. B. Hopkins, 316 Empire Bldg., is preparing plans for 4 bungalows on Adair Ave.

Ga., Atlanta.—L. T. D. Quinby has plans by Haralson Blackley, Atlanta, for residence; 2 stories; frame; furnace heat; hardwood floors; cost \$6500; receiving bids.

Ga., Atlanta.—D. W. Morgan has plans by Hentz & Reed, Atlanta, for residence; 2 stories; frame; vapor heat; hardwood floors; tile floors in bathrooms; cost \$7000.

Ga., Atlanta.—Dr. F. G. Hodgson is having plans prepared by Fred J. Orr, Athens, Ga., for residence in Druid Hills.

Ga., Atlanta.—K. K. Kelley will erect 2 frame dwellings; 1½ stories; stone foundation; furnace heat; hardwood floors; cost \$3000 each; Leila Ross Wilburn, Archt., Atlanta.

Ga., Atlanta.—John M. George will erect several residences; frame; 1½ stories; furnace heat; hardwood floors; day labor; cost about \$3000 each; Leila Ross Wilburn, Archt., Atlanta.

Ga., Atlanta.—Mrs. W. G. Raoul will erect residence on Lullwater Rd., Druid Hills; also erect \$2500 garage.

Ga., Atlanta.—R. H. Poole let contract to P. B. Hopkins, 316 Empire Bldg., Atlanta, to erect bungalow on Lakewood Ave.; cost \$3000.

Ga., Atlanta.—W. S. Featherstone, 228 N. Boulevard, has plans by H. K. Chapman, 134 East Ave., Atlanta, for dwelling; 12 rooms; brick veneer; vulcan shingle or slate roof;

heating not determined; gas and electric lighting; cost (without mechanical equipment), \$6000; day labor. (Late-ly noted.)

Ga., Quitman.—D. G. Malloy has plans by Bishop & Greer, Valdosta, Ga., for dwellings; 9 rooms; cost (without mechanical equipment) \$10,000; brick veneer; slate roof; steam heat; electric lighting; construction on commission basis. (Contract late-ly reported let.)

Ga., Valdosta.—Mrs. H. C. Briggs has plans by Bishop & Greer, Valdosta, for 3 bungalows and two 2-story dwellings; dwellings stuccoed; bungalows shingled and weather-boarded rough; cost \$12,500.

Ga., Valdosta.—Geo. Patterson has plans by Bishop & Greer, Valdosta, for dwelling; buff brick; tile roof; hardwood floors; red-gum trimmings; cost \$5000.

Ga., Waycross.—Jesse Strickland receives bids until March 1 to erect dwelling; 2 stories; frame; pressed and common brick; electric lighting; sanitary plumbing; hardwood floors; plastered walls; tile roof; cost \$6000; W. B. Camp, Archt., Jacksonville, Fla.

Ky., Louisville.—A. M. Eckhardt will erect 3 frame cottages at 401-5 S. 28th St.; cost \$3000.

Ky., Louisville.—H. P. Bullock will erect four 1-story frame dwellings at 3101-07 Dumesnil St.; cost \$6800.

La., New Orleans.—Frank Palmisano will erect 2-story frame residence; cost \$3200.

La., New Orleans.—J. W. Durel will erect residence; cost about \$3000.

La., New Orleans.—Dr. David C. Williams has plans by Albert G. Bear, 600-02 Audubon Bldg., New Orleans, for residence on Neron Pl.

Md., Baltimore.—T. Milton Jones, 2440 McCulloh St., will erect 2 dwellings at 1214-16 Whitelock St.; 2 stories; brick; 14x50 ft.; cost \$3000.

Md., Baltimore.—Jos. L. White Realty Co., 299 E. Monument St., has plans by Chas. C. Broring, 9 N. Potomac St., Baltimore, for 25 dwellings at 100-148 S. Ellwood Ave.; 14x24½ ft.; cost \$25,000.

Md., Baltimore.—Harry W. Atkinson, 2214 Mt. Royal Terrace, is having plans prepared by Taylor & Mosley, 40 Wall St., New York, for residence at Guilford; 2½ stories; brick.

Md., Baltimore.—Webb & White, Title Bldg., will erect bungalow on Hawthorn Ave. near Garrison Ave., Forest Park, for client; 2½ stories; 2 tile baths; hardwood floors; green slate roof; O. B. Wight, Archt., Munsey Bldg., Baltimore.

Md., Baltimore.—Provident Realty Corporation, Piedmont and Garrison Aves., has plans by Henry J. Tinley, 312 N. Charles St., Baltimore, for 4 residences at Piedmont and Elsinor Aves.; 2½ stories; frame; 28x30 ft.; cost \$4000; Roslyn Ave. near Windsor Mills Rd., 2½ stories; frame; 28x34 ft.; cost \$4500; another in same neighborhood, 2½ stories; 30x32 ft.; one on Elsinor Ave. near Alto Ave., 26x32.6 ft.; cost \$3500.

Md., Baltimore.—Dr. Edw. Grempier, 517 Scott St., will erect 5 two-story dwellings at 842-50 Mangold St.; slag roofs; cost \$4000; Wm. F. Welsh, Archt., 715 Scott St., Baltimore.

Miss., Clinton.—R. W. Hall will rebuild dwelling; 6 rooms; mill construction; shingle roof; grates; electric wiring; cost (without mechanical equipment) \$3000; construction by June 1. (Late-ly reported burned.)

Mo., Kansas City.—D. C. Clawges will erect 2 two-story residences at 617-621 W. 58th St.; cost \$11,500.

Mo., Kansas City.—G. E. Baltis will erect 2 one-story residences at 3836-38 Montgall Ave.; cost \$3600.

Mo., Kansas City.—Frank W. Coover will erect two 1½-story residences at 5036-38 College Ave.; cost \$5000.

Mo., St. Louis.—Wm. H. Bergmann will erect 7-room residence on Greer Ave.; cost \$6000.

Mo., St. Louis.—J. Barney Venker will erect bungalow.

Mo., St. Louis.—A. L. Thurmman will erect 3-story dwelling at 4109 Flora St.; cost \$7300.

Mo., St. Louis.—Katherine Ryan will erect 3 dwellings at 3124-28 and 34 Geyer St.; 2 stories; cost \$10,200.

Mo., St. Louis.—Stanford Investment Co. will erect two 2-story dwellings at 5717-19 Westminster St.; cost \$12,000.

N. C., Charlotte.—Methodist church will rebuild parsonage recently burned. Address The Pastor, Methodist Church.

N. C., Charlotte.—John M. Scott will erect residence; New England colonial style; 9 rooms; cost (without mechanical construction) \$15,000 to \$20,000; ordinary construction; slate roof; hot-water heat; electric

lighting; Louis H. Asbury, Archt., Charlotte.

N. C., Danbury.—Methodist Episcopal church will erect parsonage Address The Pastor.

N. C., Danbury.—J. D. Humphreys will erect residence.

N. C., Hickory.—Hickory Land & Development Co. has plans by C. H. Lester, Statesville, N. C., for 5 dwellings; cost \$3000 each.

N. C., Hickory.—Hugh D'Anne has plans by Louis H. Asbury, Charlotte, for dwelling; brick veneer; cost \$8000.

N. C., Raleigh.—C. V. York has plans by James A. Salter for 10 dwellings in Bloomsbury; cost \$40,000; 8 rooms each; ordinary construction; slate and shingle roof; hot-water or vapor steam heat; electric lighting; cement sidewalks; construction by owner.

Okla., Tulsa.—Chas. H. Nesbaw will erect two 1-story frame dwellings at 14 and 18 N. Utica St.; cost \$3000.

Okla., Tulsa.—Grant & Moore will erect 2-story frame dwelling 1221 S. Boston Ave.; cost \$3000.

S. C., Walhalla.—J. B. Quartermus will erect dwelling; 50x76 ft.; brick; metal roof; American ideal radiator costing \$1000; cost (without mechanical equipment) \$10,000; plans and construction by owner. (R. T. Jones late-ly noted to erect dwelling.)

Tenn., Knoxville.—H. J. Cook, 1121 Circle Park, will repair dwelling late-ly reported damaged by fire. (See Machinery Wanted.)

Tenn., Memphis.—A. C. Floyd will erect residence at 399 McNeil St.; cost \$3500.

Tenn., Memphis.—S. B. Anderson, Prest. of Anderson-Tully Co., will erect dwelling in Morningside Heights.

Tex., Beaumont.—St. Mark's Episcopal Church will erect rectory, parish-house and church. Address The Pastor.

Tex., Beaumont.—J. L. Cunningham will erect 6-room frame residence on Magnolia Ave. and 2-story frame residence on Liberty St.; cost \$5000.

Tex., Dallas.—T. H. Nesbit will erect 3 5-room cottages on Carlisle St.; cost \$3000.

Tex., Dallas.—J. B. Cranfill will erect 2-story 10-room frame dwelling at 4615 Gaston St.; cost \$3500.

Tex., Dallas.—W. A. Thomas will erect 2-story 8-room frame residence at 3918 Bowser St.; cost \$3000.

Tex., Dallas.—J. W. Bourland will erect 10-room 2-story residence at 3505 Oak Lawn St.; brick construction; cost \$10,000.

Tex., Dallas.—G. I. Walker will erect 2-story 9-room frame building at 4122 Columbia St.; cost \$3500.

Tex., Dallas.—C. R. Nesbit will erect two 8-room 2-story frame residences at 4716-20 Gaston St.; cost \$6000.

Tex., Dallas.—W. H. Mitchell will erect 10-room 2-story frame residence at 2410 Hickory St.; cost \$6500.

Tex., Dallas.—W. L. Provine will erect 14-room 2-story frame residence at 2913 S. Boulevard; cost \$3500.

Tex., Houston.—Mrs. Rena Yoho will erect 9-room residence on Harrisburg Rd.; cost \$3500.

Tex., San Antonio.—R. R. Scott will erect 2-story dwelling on E. San Pedro Pl.; cost \$4000.

Tex., San Antonio.—Jesse Yantis will erect 2-story dwelling on Hamilton Ave.; cost \$4000.

Va., Graham.—T. E. Nash is reported to erect number of dwellings.

Va., Graham.—C. B. Bailey is reported to erect 2 dwellings.

Va., Norfolk.—Mrs. E. A. Goeting will erect 2-story frame residence on 36th St.; cost \$4700.

Va., Norfolk.—W. H. Terry will erect dwelling in Maury Pl.; 2 stories; brick and frame; cost \$6000.

Va., Roanoke.—E. J. Tice will erect 2-story brick-cased dwelling on 13th Ave. S. W.; cost \$4000.

GOVERNMENT AND STATE

Ark., Batesville.—Postoffice.—H. C. Wade, custodian of postoffice, receives bids until Feb. 7 for painting and repairs on postoffice building; information on application. (Late-ly noted.)

Ark., Little Rock.—Postoffice.—Custodian of postoffice opened bids for repairs, painting, etc., on postoffice building; J. P. Sullivan, Chicago, is lowest bidder at \$244. (Late-ly noted.)

Fla., Key West.—Officers' Quarters.—Chief

of Bureau of Yards and Docks, Washington, D. C., opened bids to erect officers' quarters at Naval Station; Riley Bros. & Co., Key West, are lowest bidders at \$7295 net price for quarters complete and \$14,550 net price for 2 houses complete. (Late-ly noted.)

Miss., Jackson.—State-House Committee of Legislature reported favorably on bill to remodel old capitol building at cost of about \$75,000 for several departments of State government.

Okla., Oklahoma City.—Capitol.—W. B. Anthony, P. J. Goulding and S. A. Douglas will receive applications from architects who desire to prepare plans for and supervise construction of capitol building, until Feb. 29; will probably have red granite foundation and basement; gray granite superstructure; marble wainscoting and stairs; natural gas heating and lighting; has \$750,000 appropriation. (Noted in June.)

S. C., Fort Moultrie.—Officers' Quarters.—Government will expend \$17,000 (cost without mechanical equipment) to erect 14 one-story non-commissioned officers' quarters; ordinary construction; shingle roof; John W. C. Abbott, Capt., Constructing Quartermaster. (Late-ly noted to receive bids until Jan. 20.)

Tenn., Bolivar.—Hospital.—Trustees of Western Hospital for Insane, D. W. Parran, Chrmn., opens bids Feb. 17 to erect building; 50x125 ft.; cost (without mechanical equipment) \$50,000; ordinary construction; tin roof; blower system of heating; dumbwaiters; R. A. Heavener, Archt., Jackson, Tenn. (Late-ly noted to receive bids until Feb. 3.)

Tex., Fort Worth.—Postoffice.—Custodian of postoffice will receive bids until Feb. 10 for repairs to postoffice building.

Va., Norfolk.—Postoffice.—C. L. Wright, custodian, receives bids until Jan. 29 for repairs, painting, etc., on postoffice building; information on application.

HOTELS

Ala., Athens.—J. H. Raney will erect 2-story brick building to be occupied by R. C. Harris & Co. for cafe and hotel.

Ark., Hot Springs.—Ed. H. Johnson, Prest. of Security Bank, is reported to erect hotel and store building at Market, Olive, Central and Ouachita Sts.; brick and concrete; cost \$25,000.

D. C., Washington.—Jewel Hotel Co. accepted plans by C. E. Webb, 237 Rhode Island Ave. N. W., for hotel at 713-15 and 17 N. Capitol St.; 4 stories and basement; white stone and stucco front; Spanish tile roof; main fireproof stairway; 60 bedrooms on 3 upper floors; shower baths; corridors to have ceramic tile floors and marble wainscoting; bowling alleys, heating plant, storage-rooms, etc., in basement; cost about \$50,000.

Fla., Jacksonville.—C. C. Clayton, 933 W. Bay St., indefinitely postponed erection of hotel. (Noted Apr. 3, 1913.)

Ky., Paducah.—Sanitola Springs Co., E. V. Eaton, Prest., will erect hotel-sanatorium, baths, etc. (See Land Developments.)

Okla., Tulsa.—Tate Brady will add eighth story to hotel; cost \$10,000.

S. C., Camden.—K. C. Whistler will not erect hotel, as late-ly reported.

S. C., Spartanburg.—Col. T. C. Duncan of Union, S. C., contemplates erecting tourist hotel at North Church and Charles Sts.

Tenn., Tate Springs.—Tate Spring, Incorporated, S. B. Allen, managing director, will erect hotel and make improvements to cost \$130,000; to provide 100 additional rooms with bath, making a total of 200 rooms; fireproof; will not consider plans until middle of summer; company's capitalization will be \$400,000 and \$250,000 in 5 per cent. 25-year bonds. (Tate Spring Hotel Co. late-ly noted as increasing capital stock to \$400,000 and as to erect 100-room hotel.)

Tex., Christoval.—Christoval Mineral Wells Co. will erect 50-room hotel; plans being prepared.

Va., Norfolk.—E. L. May, Omaha, Neb., is reported as planning to erect hotel; cost \$100,000.

Va., Roanoke.—Bartel & Saunders, Ponce de Leon Hotel, Roanoke, purchased site 151x250 ft. at Jefferson St. and 7th Ave. from Columbia Trust Co. and are reported to erect hotel; 12 stories; fireproof; cost \$500,000.

W. Va., Martinsburg.—Luigi Botti, 135 E. Martin St., will erect building at 115-117-119 East Martin, probably for hotel and store; 3 stories and basement; brick and concrete; 36x50 ft.; 2 stores on first floor; 15 living-rooms on second and third floor.

MISCELLANEOUS

Ark., Texarkana.—Clubhouse.—Texarkana Country Club organized by T. L. Temple, E. W. Frost, Wm. Buchanan and others; acquired 68-acre tract and will erect clubhouse, construct tennis courts, golf course, etc.

D. C., Washington.—Restaurant.—Geo. P. Hales, 1406 G St. N. W., prepared plans to remodel restaurant at 1341 F St. N. W.; cost about \$10,000.

D. C., Washington.—Memorial.—United States Government, Secy. of War Lindley M. Garrison, Chmn. of Comm., is reported receiving bids to erect memorial building for American Red Cross; 2 stories and basement; white marble; assembly-room, 50x64 ft.; reported cost, about \$800,000; Trowbridge & Livingston, Archts., 527 5th Ave., New York. (Lately noted.)

Fla., Palatka.—Clubhouse.—Palatka Woman's Club will erect clubhouse to cost \$8000.

Ga., Thomasville.—Auditorium.—J. W. L. Yates is reported to erect auditorium on city lot between city hall and police barracks.

Ky., Dawson Springs.—Amusement.—Dawson Springs Bottling Co. will erect amusement building for entertainment of company's guests. (See Miscellaneous Enterprises.)

Ky., Paducah.—Natorium, etc.—Sanitola Springs Co., W. V. Eaton, Prest., will erect natorium, baths, etc. (See Land Developments.)

Mo., Kansas City.—Home.—Kansas City Home for the Aged has plans by Sayler & Selden, Gumbel Bldg., Kansas City, to remodel home.

N. C., Charlotte.—Parish-house.—St. Mark's Lutheran Church, Rev. R. L. Patterson, pastor, will erect Sunday-school building and parish-house.

N. C., Newton.—Fair.—Catawba County Fair Assn. will be organized to purchase site and erect permanent fair buildings; is considering Newton, Hickory, Startown and St. James as probable locations.

N. C., Winston-Salem.—Clubhouse.—Forsyth County Club has 117 acres and will improve for country club; W. C. Northup, Winston-Salem, will prepare plans for building; ordinary construction; cost \$12,000.

Tenn., Chattanooga.—Clubhouse.—J. T. Lupton, R. S. Faxon, M. M. Hedges, M. M. Allison and Theo. L. Montague are building commission to erect building for Golf and Country Club; cost \$50,000. (Lately noted to rebuild burned structure.)

Tenn., Johnson City.—Library.—Board of Mayne Williams Library will erect building.

Tex., Beaumont.—Parish-house.—St. Mark's Episcopal Church will erect parish-house, rectory and church. Address The Pastor.

Tex., Galveston.—Stables.—Hanson's Sons will rebuild stables; concrete and fireproof; fireproof roof; electric lighting to cost \$300. (Lately reported damaged by fire.)

Tex., Houston.—Clubhouse.—Concordia Club is reported to erect club building on La Branch St.; cost about \$50,000.

W. Va., Wheeling.—Clubhouse.—Wheeling Country Club will issue \$25,000 bonds, \$10,000 to be used for improvements to clubhouse; will increase floor space, remove kitchen from second floor to ground floor; remodel several rooms for dining-rooms; erect porte-cochere, extend driveway, etc.

RAILWAY STATIONS, SHEDS, ETC.

Ark., Forrest City.—State Railroad Commission will receive plans from St. Louis, Iron Mountain & Southern Ry., J. R. Stephens, Ch. Engr., St. Louis, March 14 for proposed depot.

Ga., Savannah.—Savannah Electric Co., H. C. Foss, Mgr., will rebuild car barn by company's force; mill construction. (Lately reported to cost \$50,000.)

N. C., Reidsville.—Southern Ry. Co., B. Herman, Chief Engr., 1300 Pennsylvania Ave. N. W., Washington, D. C., is reported to erect depot.

Okla., Claremore.—St. Louis, Iron Mountain & Southern R. R., J. R. Stephens, Ch. Engr., St. Louis, is reported to erect passenger and freight depot.

Okla., Fort Gibson.—St. Louis, Iron Mountain & Southern R. R., J. R. Stephens, Ch. Engr., St. Louis, is reported to erect passenger station; 120x26 ft.; cost \$8000.

Okla., Tulsa.—Receivers for St. Louis & San Francisco Ry., V. K. Hendricks, Engr., St. Louis, are reported to begin erection of freight depot and office building by March 1; plans call for brick freight depot 40x75 ft.; 1 story; office building 2 stories, 40x70 ft. (Lately noted.)

Tex., Fredericksburg.—H. T. Love, V.-P. and Gen. Mgr. San Antonio, Fredericksburg & Northern R. R., states railway station (lately noted) has been completed.

Tex., Rhonessboro.—Marshall & East Texas Ry., J. R. Lockwood, Ch. Engr., Marshall, Tex., is reported to erect depot.

W. Va., Fenwick.—Baltimore & Ohio R. R., F. L. Steuart, Ch. Engr., Baltimore and Charles Sts., Baltimore, Md., will erect depot to cost \$4500.

W. Va., Wallace.—Baltimore & Ohio R. R., F. L. Steuart, Ch. Engr., Baltimore and Charles Sts., Baltimore, Md., will erect depot to cost \$6400.

SCHOOLS

Ala., Lanett.—Lanett School Dist. will vote Feb. 9 on \$12,000 bonds to erect school. Address Dist. School Trustees.

Ala., Mountain Creek.—Wm. F. Feagin, Supt. Dept. of Education, Montgomery, Ala., states location for Chilton county high school has not yet been selected. (Lately noted to erect building.)

Ark., Hardy.—Hardy Special School Dist. is reported to have issued \$15,000 bonds to erect school. Address School Trustees.

Fla., Arcadia.—City will vote on \$65,000 school-building bonds. Address The Mayor.

Fla., Gainesville.—Board of Control, P. K. Yonge, Chmn., will expend \$30,000 (cost without mechanical equipment) to erect law building for University of Florida; 40x60 ft.; ordinary brick and terra-cotta construction; tile roof; steam heat; W. A. Edwards, Archt., Candler Bldg., Atlanta. (Lately noted to receive bids until Feb. 9.)

Fla., Lakeland.—Lakeland School Dist. has plans by Bonfoey & Elliott, Tampa, for school; 2 stories; brick; cost \$10,000. (Lately noted.)

Fla., Ocala.—Marion County Board of Public Instruction, J. H. Brinson, Secy., receives bids until Feb. 17 to erect school, also for heating and plumbing for same; plans and specifications at office of Supt., Ocala, and Mark & Sheftall, Archts., Jacksonville.

Fla., Palatka.—J. D. Cottingham, Supt., Putnam County Board of Public Instruction, states no bonds will be issued to erect school as lately reported.

Fla., Wildwood.—G. H. Thompson, Secy. Board of Public Instruction of Sumter County, receives bids until Feb. 21 to erect brick school; 7 classrooms, auditorium, offices, etc.; cost about \$12,000; plans and specifications at office of Bishop & Greer, Archts., Valdosta; C. W. Mann, Chmn. of Board. (Lately noted.)

Ga., Athens.—Board of Education is reported to remodel courthouse for school purposes at cost of \$28,000.

Ga., Williamson.—Williamson School Dist. voted \$6000 bonds; will erect building 56x60 ft.; 2 stories; cost (without mechanical equipment) \$5500; brick veneer; metal roof; Gresham Mfg. Co., Archt., Griffin, Ga.; plans and specifications not complete. Address proposals to L. N. Walker, Secy. School Dist.

Ky., Elkton.—Managers of Vanderbilt Training School appointed Dr. R. W. Browder, Russellville, Ky.; John N. Williams and Jas. M. Weathers, both of Elkton, special committee to erect \$15,000 dormitory.

La., Lake Charles.—Favrot & Livaudais, Archts., Perrin Bldg., New Orleans, receive bids until Feb. 3 to erect 2-story-and-basement convent building at Lake Charles for Marianne Sisters of the Holy Cross; plans, specifications, etc., from architects as above.

La., New Orleans.—Dominican Fathers, Father Lorente, Superior, has plans by Tole-dano & Wagon, New Orleans, for school on Canal St.; 2 stories; tapestry brick; cement trimmings.

La., Turkey Creek.—Evangeline Parish School Board, J. C. Verdine, Prest., Ville Platte, La., will erect 2-story frame school; cost \$6000. (Lately noted.)

La., Vivian.—School Board opens bids about April 20 to erect school; 100x172 ft. cost (without mechanical equipment) about \$60,000; fireproof; tile roof; steam heat; address proposals to Chas. Norris. (Lately noted.)

Md., Capitol Heights.—Prince George County Commrs. are considering \$15,000 bond issue to erect school.

Md., College Park.—Maryland Agricultural College is having plans prepared by Flournoy & Flournoy, 701 Wilkins Bldg., Washington, D. C., for gymnasium in addition to recently-noted structures; classic colonial style; cost \$75,000.

Miss., Tunica.—Tunica county voted \$20,000 bonds to establish agricultural high school. Address County Commrs. (Lately noted.)

Mo., Kansas City.—Jas. B. Jackson, Jr., Secy of Board of Directors of Kansas City

School Dist., receives bids until Jan. 31 for material and work to complete McCoy School at 16th St. and White Ave.; plans and specifications at office of Chas. A. Smith, Archt., 602 Finance Bldg., Kansas City.

Mo., Kirksville.—Kirksville School Dist. voted \$80,000 bonds to purchase site, erect and furnish high school and one other school. (Lately noted.)

Mo., Kirkwood.—Kirkwood School Dist. voted \$65,000 bonds and will erect 2-story brick building to contain 12 rooms and cost \$45,000; also erect \$15,000 4-room brick building at Glendale and expend \$5000 to repair 2 schools in Kirkwood and 2 in Meacham Park. (Lately noted.)

Mo., Strafford.—J. J. Foster, Secy., Consolidated Dist. No. 2, receives bids until Jan. 30 to erect 2-story brick school; O. L. Brettiner, Archt., Woodruff Bldg., Springfield, Mo.

N. C., Edenton.—Chowan county voted \$25,000 bonds to erect farm life and high school. R. H. Bachman, Supt. Edenton Graded Schools.

N. C., Oak Ridge.—M. H. and J. A. Holt, proprietors of Oak Ridge Institute, will rebuild institute buildings lately noted burned.

Tenn., Dunlap.—Sequatchie county will, it is reported, issue \$5000 school-improvement bonds. Address County Commrs.

N. C., Pineville.—Mecklenburg County Commrs., Charlotte, N. C., selected Pineville as location for proposed farm school.

N. C., Salisbury.—Walter H. Woodson, H. A. Rouzer, T. J. Jerome and others are committee to promote erection of school; bond issue being considered.

Okla., Tulsa.—City votes in Feb. or Mch. on \$500,000 bonds to erect high school to cost \$300,000; 2 or 3 stories. Address The Mayor. (School Board lately noted as appointing E. E. Oberholtzer and others to confer with Commercial Club concerning bonds.)

S. C., Charleston.—Board of Public School Commrs., A. B. Rhett, Supt., invites archts. to submit plans, drawings and specifications until March 1 to remodel Courtenay School, containing 20 classrooms, principal's office, teachers' retiring-room and assembly hall; cost \$25,000; plans not to include toilet system nor heating apparatus, except that provision shall be made for heating by stoves or for installing heating plant later if necessary, and to include wiring for electricity and piping for gas.

S. C., Owings.—Gray Court Owings Institute, C. B. Owings, Secy., voted \$7000 bonds to erect school building.

Tenn., Chattanooga.—University of Chattanooga, H. S. Probasco, Chmn. of Grounds and Building Comm., is reported to soon begin construction of gymnasium building at Baldwin and Oak Sts.; cost about \$50,000. (Previously noted.)

Tenn., Nashville.—City will probably vote in late spring on bonds to erect addition to Hume Fogg high school. J. J. Keyes, Supt. of Public Schools.

Tenn., Nashville.—Davidson County Department of Public Instruction, A. C. Anderson, Supt., is reported to erect several high schools.

Tex., Bishop.—Trustees of Bishop Independent School Dist. receive bids until Feb. 9 to erect 2-story-and-basement semi-fireproof school building and 3 two-room buildings; plans and specifications at office of J. H. Williams, Secy. of School Board, and W. J. Ehlers, Archt., Bishop. (Lately noted.)

Tex., Carrizo Springs.—C. H. Page & Bro., Archts., Austin and Houston, Tex., will prepare plans for \$35,000 school building; 2 stories; brick. (Common School Dist. No. 1 of Dimmitt County lately noted as to erect \$35,000 school.)

Tex., Fort Worth.—School Board will expend (cost without mechanical equipment) \$600,000 to erect 2 fireproof schools; 61x68 ft.; 3 stories; steam heat; electric lighting; cement walks; Muller, Pollard & Leake, Archts., 514 F. & M. Bank Bldg., Fort Worth; bids opened Jan. 24. (Lately noted.)

Tex., Waco.—City will vote on \$150,000 bonds for school. Address The Mayor.

Tex., Rock Springs.—Rock Springs School Dist. voted \$15,000 building bonds.

Tex., San Antonio.—School Board will erect 7 concrete schools and improve 8 other schools as follows: Southwest division, 8-room building to cost \$24,000, 2-room addition to school No. 8 to cost \$4000, 4-room addition to Carr Hill school to cost \$8000; Northwest division, 8-room building on Lopez St. to cost \$30,000, 2-room addition to Marshall St. school at \$4000, 8-room concrete school in Beacon Hill to cost \$24,000; install heating in school No. 1, cost \$3000; Northeast division, 8-room build-

ing on Starr St. to cost \$24,000, 2-room addition to school No. 17 to cost \$4000; Southeast division, 8-room school in Highland Park to cost \$32,000, 2-room addition to LaJette St. school to cost \$4000; \$40,000 school probably to be erected on East side, 12 rooms, concrete; Manual Training and Domestic Science building at Main Ave. high school, cost \$50,000; also plans to improve Brackenridge high school on S. Alamo St. by erecting 4 additional rooms and remodeling building, cost \$18,000; plans for Bacon Hill, Highland Park and Manual Training and Domestic Science schools by Leo. M. J. Diekmann, San Antonio. (Previously noted voting \$300,000 for schools.)

Tex., Yoakum.—Howard Baldwin has plans by J. H. Yentzen, Yoakum, for business college; fireproof; plans not determined.

Va., Blacksburg.—Virginia Polytechnic Institute, Theo. P. Campbell, dean of faculty, states no contract let for mechanics and art building, for which plans were drawn by Carneal & Johnston; construction under supervision of D. O. Matthews, Supt. of Buildings and Grounds. (See Foundry and Machine Shops.)

Va., Highland Springs.—Fairfield School Board has plans by Charles K. Bryant, Richmond, for school to replace burned structure; 100x60 ft.; tin roof; cost about \$25,000; cost of heating plant about \$2000; 12 classrooms; assembly hall to seat 550. (Lately noted.)

Va., Lynchburg.—Randolph Macon Woman's College has not yet adopted plans for building to contain auditorium, office and reception-room. (Lately noted to cost \$60,000.)

Va., Norfolk.—Finance Comm. of City Council approved \$25,000 appropriation for school improvements in Seventh Ward.

Va., Williamsburg.—James City county contemplates voting on \$25,000 bonds for schools in Stonehouse and Powhatan School Dist. Thos. H. Geddy, Clerk.

W. Va., Martinsburg.—Rev. W. A. McKee-fry, rector of St. Joseph's Catholic Church, has plans to erect parochial school; two stories and basement; brick; accommodations for 200 pupils; cost \$15,000.

W. Va., Moorefield.—Moorefield School Dist. is reported as having plans prepared by Holmboe & Lafferty, Clarksburg, W. Va., for school; cost \$30,000. (Previously noted.)

STORES

Ala., Dadeville.—Mrs. Nora Miller will rebuild structure reported burned.

Ala., Dadeville.—Wm. Gray will erect building to replace burned structure.

Ark., Hot Springs.—Ed. H. Johnson, Prest. of Security Bank, is reported to erect store and hotel building. (See Hotels.)

Ark., Little Rock.—Althelmer Dry Goods Co., 6th and Center Sts., is reported to expend \$25,000 to remodel building; plans include 350 ft. plate-glass show windows; removal of brick wall on 6th St. and installing plate-glass show windows, altering second floor, etc.

D. C., Washington.—American Five and Ten Cent Store is having plans prepared by Donn & Denning, 808 17th St., Washington, to rebuild store building at 314-16 7th St. N. W.; 3 stories; tapestry brick; facade treated ornamentally with panning and decorative terra-cotta; cost \$30,000.

Fla., Dade City.—Dade City Building and Loan Assn. organized with Wm. Redding Prest.; will erect store, bank and office building. (See Bank and Office.)

Fla., Jacksonville.—Gustave Miller will erect 2-story brick building on Enterprise St.; cost \$6000.

Fla., Jacksonville.—O. T. Kimball, 921 E. 12th St., has plans by Geo. Thompson for building; 48x57 ft.; 2 stories on first floor; 4 apartments above; fireproof; brick; gravel roof; electric lighting; cement sidewalks; cost (without mechanical equipment) \$7000; construction by owner. (Lately noted.)

Fla., Key West.—Jefferson B. Browne is reported to rebuild burned structure.

Fla., Oviedo.—J. B. Jones is reported to erect brick business building to replace structure reported burned.

Fla., Plant City.—W. B. Herring will erect store building to be leased to Trefont Constantine of Lake City, Fla.; 1 story; brick; completion by April 1.

Ga., Americus.—W. E. Mitchell will erect building on Hampton St.; brick; 50x102 ft.; T. L. Granberry will superintend construction.

Ga., Augusta.—W. F. Cavanaugh, trustee for Moore estate, will repair building. (Lately reported damaged by fire.)

Ga., Pelham.—Pelham Investment Co., J. L. Hand, Prest., opens bids in about 60 days

to erect department store; cost (without mechanical equipment) \$12,000; 150x150 ft.; fireproof; probably concrete roof; steam heat; electric lighting; concrete sidewalks; plans ready in 30 days. (Lately noted.)

Ky., Carlisle.—McCann & Alexander are reported to erect business building on East Main St.

Ky., Jackson.—Chas. Terry opens bids about April 1 to erect store and office building; 75x60 ft.; cost (without mechanical equipment) \$7500; ordinary construction; galvanized roofing; hot-water heat; electric lighting; M. S. Canning, Archt., Jackson; lately noted. (See Machinery Wanted.)

Ky., Jackson.—J. S. Redwine will erect 52x52-ft. store building lately noted; mill construction; cost (without mechanical equipment) \$4000 to \$5000; construction under supervision of owner. (See Machinery wanted.)

Mo., Frederick.—Frederick Trust Co., Reno S. Harp, Pres., will expend \$7500 (cost without mechanical equipment) to erect store and apartment building; 40x50 ft.; mill construction; slag roof; steam heat; B. E. Evard Kepner, Archt., Frederick. (Lately noted.)

Mo., Joplin.—Interstate Grocer Co., W. F. Spurgin, Pres., 224 Virginia Ave., has plans by J. W. McKeeknie, Gloyd Bldg., Kansas City, Mo., for grocery store; 127x165 ft.; cost (without mechanical equipment) \$175,000; fireproof reinforced concrete construction; brick walls; gravel roof; low pressure steam heat, costing \$2500; double screw drum electric elevator; bids opened Feb. 15; sub-contracts will include reinforced concrete, brick work, electric wiring, elevators, gravel roof, metal sash, fire doors, ornamental terra-cotta, spiral chute, miscellaneous iron and vitreous tiling. (Lately reported.)

Mo., Kansas City.—Ajax-Grieb Rubber Co., W. L. Bayha, Branch Mgr., 1606 Grand St., will remodel building at 1730 Grand Ave.; Kittanning brick front; white cut stone and enamel terra-cotta trimmings; white tile floors; indirect lighting system; electric elevator; spur track; 24x115 ft.

Mo., St. Louis.—Mrs. Estelle K. Smith will erect store at Union and Northland Ave.

Mo., St. Louis.—Mackey Furnishing Goods Co., leased Carpenter Bldg. at 517-19 Olive St., and is reported to expend \$10,000 for improvements; to include new front with double show windows, new entrance, etc.

Mo., St. Joseph.—J. G. Schneider will construct inside wall for building on 7th St. between Felix and Francis Sts.; cost \$3000.

Mo., St. Louis.—Isaac S. Taylor, Archt., St. Louis, states he is not making plans to remodel Catlin Bldg. (This building lately reported acquired by Greenfield Bros. Clothing Co. and Mr. Taylor noted as architect to remodel.)

N. C., Hickory.—Patrick Mosteller Co. will erect store; cost \$7000; plans not decided.

N. C., Hickory.—M. H. Yount has plans by E. Q. Herman, Hickory, for store and office building; cost \$5000.

Okla., Bartlesville.—Sutton-Keeler-Morton Co. is reported receiving bids to erect 6-story building at 4th and Johnson Ave.

Okla., Tulsa.—Tate Brady will erect 1-story brick store at Boulder Ave. and Archer St.; cost \$4000; also 2-story brick business block on N. Main St.; cost \$3000.

S. C., Florence.—John M. Timmons is reported to erect business building to cost \$25,000.

S. C., Florence.—W. M. Waters will rebuild store; 75x125 ft.; 3 stories; ornamental front of brick, plate glass and iron; cost \$35,000. (Lately noted burned.)

Tenn., Lebanon.—F. J. Sanders will erect 4 store buildings; apartments second floor. (See Apartment-Houses.)

Tenn., Memphis.—Geo. Mohr will erect two-story brick store at Linden and Front Sts.; cost \$11,000.

Tex., Beaumont.—H. A. Perlstein will erect business building; 2 stories; brick.

Tex., Brenham.—H. F. Hohlt Co. increased capital stock from \$75,000 to \$125,000 and will remodel building; cost (without mechanical equipment) \$10,000 to \$15,000; C. H. Page & Bros., Archts., Austin, Tex.; date of opening bids not set.

Tex., Dallas.—J. P. Greaber will expend \$3266 to repair building.

Tex., Dallas.—W. D. McMillan will erect 1-story brick building at 223 Main St.; cost \$5000.

Tex., Goliad.—Dr. L. W. Shilton has plans for brick building.

Tex., San Antonio.—Louis Oger will erect brick store building on W. Commerce St.; cost \$12,000.

Tex., San Antonio.—L. K. Nowlinski, 1201 Zavala St., contemplates erecting business building. (Lately noted to erect building at Tex., Floresville.)

Tex., San Antonio.—Emma Dittmar will erect addition to store building on West Commerce St.; cost \$5000.

Tex., San Marcos.—Ike Wood will erect brick store.

Va., Richmond.—Mrs. Mina Loth will erect store 1st St.; 2 stories; brick; cost \$3680.

W. Va., Pageton.—Bids until Feb. 10 to erect reinforced concrete store building; 72x77 ft.; 3 stories; plans obtainable from Alex. B. Mahood, Archt., Bluefield, W. Va., on deposit of \$15.

W. Va., Martinsburg.—Luigi Botti, 135 E. Martin St., will erect building at 115-117-119 E. Martin St. (See Hotels.)

THEATERS

Ky., Harlan.—Jno. A. Creech and F. F. Cawood will erect moving-picture theater; cost \$5000.

Mo., Baltimore.—Hippodrome Co., Marion S. Pearce, Pres., 415 E. Baltimore St., will receive bids until Feb. 3 to erect theater at Eutaw and Baltimore Sts.; fireproof; main floor and balcony; water-cooled ventilating system; indirect lighting system; lounging and retiring rooms; seating capacity 2000; stores on both sides of entrance; 10 bowling alleys in basement; 75x140.11 ft.; cost \$200,000; Thos. W. Lamb, Archt., 501 5th Ave., New York; Wm. C. Schnabel, Consult. Engr., 2016 Harford Rd., Baltimore; contractors estimating are Morrow Bros., Fidelity Bldg.; Chas. L. Stockhausen, Marine National Bank Bldg.; Singer-Pentz Co., 600 Equitable Bldg.; Consolidated Engineering Co., 61 Gunther Bldg.; J. Henry Miller, Inc., Eutaw and Franklin Sts.; Cowan Bldg. Co., 106 W. Madison St.; Henry Smith & Sons Co., 7 E. German St.; Irwin & Leighton, Keyser Bldg.; Fred Decker & Son, 1213 E. Biddle St.; all of Baltimore; George A. Fuller Co., Munsey Bldg., Washington, and Fuller Bldg., New York; Cramp & Co., Denckla Bldg., Philadelphia, and J. P. Brady Co. of New York. (Lately noted.)

Mo., St. Louis.—Joseph Hallmann will erect motion picture theater at 2912-14 Chipewa St.; 1 story; cost \$6000.

S. C., Anderson.—Anderson Theater Co. probably opens bids March 1 to erect theater and office building at 127 Peoples St.; 82x204 ft.; cost (without mechanical equipment), \$40,000; ordinary construction; character of heating and lighting not determined; probably install elevator; J. K. Bryant, Archt., Richmond, Va. (Lately noted.)

Tenn., Murfreesboro.—Tony Sudekum, Nashville, Tenn., opens bids Feb. 1 to erect theater; 40x125 ft.; composition roof; steam heat; cost (without mechanical equipment), \$18,000; Marr & Holman, Archts., Nashville, Tenn. (Lately noted.)

Tex., Waco.—W. M. Sackville is having plans prepared by E. H. Reed, Waco, to remodel Auditorium Theater at cost of about \$60,000; will improve acoustics, provide about 20 rooms for hotel apartments, increase seating capacity of theater about 500, etc.

WAREHOUSES

Ala., Mobile.—E. I. Dupont de Nemours Powder Co., Wilmington, Del., let contract to G. A. Chamblin, Mobile, to erect 3 magazines for explosives; storage capacity of dynamite magazine, 100,000 lbs.

Fla., Palatka.—Markey Wholesale Grocery Co. is constructing concrete foundation for warehouse; 40x150 ft.

Ga., Athens.—Talmadge Bros. & Co. will erect warehouse; cost \$30,000.

Ga., Atlanta.—B. F. Avery & Sons will erect building to replace burned structure; details not determined. (Mrs. E. P. Black lately reported to erect building for B. F. Avery & Sons.)

Ky., Lexington.—Land Tobacco Redrying & Storage Co., B. J. Matthews, Agt., acquired site on S. Spring St. and will erect tobacco warehouse; cost, including site, \$50,000.

La., New Orleans.—Jordy Slate Co. is reported to erect building on Julia St.; 10 stories.

La., New Orleans.—International Storage & Warehouse Co., \$300,000 capital, incptd. by Jos. Bognerts, Louis Brunet, J. L. Moreau, temporary address, St. Charles Hotel, and others; is reported to erect warehouses, etc., for oil, petroleum, etc.

Md., Baltimore.—C. D. Kenny Co., 520-24 S. Eutaw St., will erect addition to building at 526-32 S. Eutaw St.; 4 stories; brick and terra-cotta; 65x31 ft.; will let contract about

Feb. 4; Baldwin & Pennington, Archts., Professional Bldg., Baltimore; contractors estimating are: Edw. Brady & Sons, 1113 Cathedral St.; D. M. Andrew Co., Mt. Vernon Ave. and 26th St.; West Construction Co., 15 E. Fayette St.; J. J. Walsh & Son, 1533 Maryland Ave.; Cowan Building Co., 106 W. Madison St., all of Baltimore.

N. C., Dunn.—Chamber of Commerce is reported interested in organizing company to erect two tobacco warehouses.

N. C., Wilson.—Smith Tobacco Warehouse Co. will enlarge warehouse, increasing floor space to 44,000 sq. ft., and stable capacity by adding 150 to 200 stalls.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ala., Birmingham.—Wm. H. Gillespie, 321 First National Bank Bldg., has plans by and let contract to G. W. Williams, Birmingham, to erect apartment-house; 45x62 ft.; cost (without mechanical equipment) \$14,000; brick; slate roof; steam heat to cost \$800; electric lighting; all contracts let. (Lately noted under Dwellings.)

Fla., Stuart.—Frank Coventry let contract to erect store and apartment building. (See Stores.)

Ga., Atlanta.—Mrs. Smedley let contract to Mackle-Crawford Construction Co., Atlanta, to erect apartment-house; 3 stories; brick; 12 four-room suites; steam heat; tile roof; tile bathroom floors; cost \$30,000; A. N. Caston, Archt., Atlanta.

Mo., St. Louis.—Charles Knueppel let contract to Charles N. Lunds to erect two 2-story tenements at 4138-40-42 Botanical St.; cost \$8000; plans by Wm. P. McMahon.

Mo., St. Louis.—F. J. Cornwell, 810 Chestnut St., let contract to Trade Realty & Building Co., 819 Chestnut St., St. Louis, to erect apartment and store building; 45x90 ft.; fireproof; composition roof; steam heat to cost \$2500; cost of buildings (without mechanical equipment) \$27,500. (Trade Realty Co. lately noted to erect building.)

S. C., Columbia.—L. B. Owens let contract to erect apartment and store building. (See Stores.)

W. Va., Huntington.—M. Broh let contract to erect store and apartment building. (See Stores.)

ASSOCIATION AND FRATERNAL

Mo., Kansas City.—Y. M. C. A. is reported to erect building at 1822 The Pasco; reinforced concrete; cost \$70,000; Geo. L. Brown & Son, Contrs.; Smith, Rea & Lovitt, Archts., Kansas City.

S. C., Hartsville.—Hartsville Lodge No. 173, A. F. & A. M., let contract to J. M. Lawton, Hartsville, to erect Masonic Temple; 28x108 ft.; brick; patent roofing; probably steam heat and electric lighting; cost (without mechanical equipment), \$8000; E. V. Richards, Archt., Bennettsville, S. C. (Lately reported.)

BANK AND OFFICE

D. C., Washington.—W. H. Walker and O. H. P. Johnson, V-P. National Metropolitan Bank, let contract to Boyle-Robertson Construction Co., Union Trust Bldg., Washington, to remodel office building at 1738 New York Ave. N. W.; cost \$3500; Waddy B. Wood, Archt., 816 Connecticut Ave. N. W., Washington.

Ga., Savannah.—J. Maril and J. Bernstein let contract to erect office and store building lately noted. (See Stores.)

Fla., Tampa.—Tampa Savings & Trust Co. let contract to E. W. Parker, Tampa, to erect building on Franklin St.; marble front; practically 2 stories; interior mezzanine plan; cost about \$25,000; Bonfoey & Elliott, Archts., Tampa. (Lately noted.)

Md., Baltimore.—John J. O'Connor, 427 E. Lexington St., has contract to remodel Gordon apartment-house on Franklin St. near Cathedral into professional building; Geo. R. Callis, Jr., Archt., Knickerbocker Bldg., Baltimore; cost about \$5000.

Md., Baltimore.—Horn & Horn let contract to Henry Smith & Sons Co., Light and German Sts., Baltimore, to alter brick building for stores and offices; ordinary construction; slag roof, steam heat; electric lighting; ordinary construction; Otto G. Simonson, Archt., Maryland Casualty Tower, Baltimore. (Lately noted.)

Mo., Kansas City.—Mary B. Case let contract to Martin Carroll Co., 214 Postal Bldg., Kansas City, to erect building to be occupied by Kansas City Southern Ry. Co., C. E. Johnston, Chief Engr.; 6 stories and base-

Okla., Chickasha.—Bule & Wallace Hardware Co. will erect warehouse on Chickasha Ave. between 3d and 4th Sts.; 50x165 ft.; 850 sq. ft. floor space; brick; concrete floor; tar and gravel roof; walls 17 ft. high.

S. C., Columbia.—L. B. Owens will erect warehouse; 60x92 ft.; cost (without mechanical equipment) \$10,000; install elevator.

Tenn., Dickson.—Board of Trade is reported promoting organization of company to erect tobacco warehouse.

Tex., Center Point.—Center Point Grain & Elevator Co. will erect warehouse and grain elevator. (See Miscellaneous Enterprises.)

ment; reinforced concrete; flat slab; cost \$180,000; John W. McKeeknie, Archt., Kansas City. (Previously noted.)

Tex., Abilene.—W. H. Graham is reported to have let contract to R. C. Lewis, Abilene, at \$75,772 to erect office building; 6 stories; heating, plumbing, etc., to cost \$22,315 additional.

CHURCHES

Fla., Jacksonville.—Building Com. Main St. Baptist Church let contract to F. W. Long & Co., Jacksonville, to erect Sunday-school building; 48x69 ft.; composition, stone and brick; tar and gravel roof; no heating plant; electric lighting; cost (without mechanical equipment) \$16,000; Talley & Summer, Archts., Jacksonville. (Lately noted.)

Md., Catonsville.—St. William's Catholic Church let contract to J. J. O'Connor, 427 E. Lexington St., Baltimore, Md., to erect building at Ten Hills; 40x100 ft.; ordinary construction; slate roof; steam heat; electric lights; cost \$35,000; Geo. R. Callis, Archt., Knickerbocker Bldg., Baltimore. (Lately noted.)

CITY AND COUNTY

D. C., Washington.—Hospital.—Dist. Commissioners. It is reported, let contract at \$59,750 to Wells Bros., New York, to erect Emergency Hospital; 9 stories; 3 units; roof garden; Nathan C. Wyeth, Archt., 1517 H St. N. W., Washington. (Lately noted.)

D. C., Washington.—Market.—District Commrs. let sub-contracts as follows for market shelters: To Alexandria Iron Works, Evans Bldg., for iron, and to Daly & Hopper, 192 R St. N. W., for corrugated-iron roof, both of Washington; shelters, 535x46 ft.; fireproof; corrugated galvanized-iron roofing; cost (without mechanical equipment), \$12,000; Snowden Ashford, Municipal Archt.; contract lately noted let to W. E. Mooney, 505 Evans Bldg., Washington.

Ga., Thunderbolt.—City Hall.—City let contract to J. F. Adams, Thunderbolt, to erect city hall; 30x70 ft.; ordinary construction; tin roof; stoves; electric lighting to cost \$300; J. de Bruyn Kops, Archt., Savannah. (Lately noted to cost \$3000.)

La., Oberlin.—Jail, etc.—Allen Parish Police Jury will expend \$22,500 to erect jail lately noted; contract let. (See Courthouses.)

COURTHOUSES

La., Bastrop.—Morehouse Parish Police Jury let contract to Falls City Construction Co., Louisville, Ky., to erect courthouse; included in contract are reinforced concrete, pressed brick, waterproofing, terra-cotta, structural steel, ornamental iron work, terrazzo floors, fireproof vaults and vault doors, electric lighting, steam heat, plumbing, drinking fountains, etc.; Stevens & Nelson Co., Archt., 2d floor Liverpool & London & Globe Annex, New Orleans. (Lately noted.)

La., Oberlin.—Allen Police Jury will expend \$77,500 and \$22,500, respectively (cost without mechanical equipment), to erect fireproof courthouse and jail; Favrot & Livaudais, Archts., New Orleans, La.; contract lately noted let to L. R. Wright & Co., Dallas, Tex.

S. C., Yorkville.—York County Commrs. let contract at \$70,594 to Travers-Wood Co., Richmond, Va., to erect courthouse, and at \$2465 to Rock Hill Heating & Plumbing Co., Rockhill, S. C., for plumbing and heating; gravel roof; steam heat; W. A. Edwards, Archt., Candler Bldg., Atlanta, Ga. (Lately noted.)

DWELLINGS

D. C., Washington.—Ernest G. Walker, 205 Dist. National Bank Bldg., will expend \$17,000 (cost without mechanical equipment) to erect 3 dwellings; 23x50 ft. each; semi-fireproof construction; composition roof; hot-

water heat, costing \$1000; Reginald W. Genre, Archt., 327 Woodward Bldg., Washington; contract lately noted let to Wm. Todd, 205 Dist. National Bank Bldg., Washington.

D. C., Washington.—Louisa Volland let contract to Chas. D. Volland, 1526 1st St. N. W., Washington, to erect 2-story frame residence at 1305 Monroe St. N. E.; cost \$500; E. Volland, Archt., 1348 Kearney St. N. E., Washington.

Ga., Atlanta.—Mrs. Ada Simms let contract to H. W. Nicholes & Son, Atlanta, to erect residence; brick veneer; tile roof; vapor heat; hardwood floor; tile floors in bathrooms; cost \$7500.

Ga., Atlanta.—Mrs. L. W. Nicholes let contract to H. W. Nicholes & Son, Atlanta, to erect 2 bungalows; frame; granite front; brick foundation in rear; hot-air heat; hardwood floors; tile floors in bathrooms; cost \$7000.

Ga., Atlanta.—Mrs. E. Williams let contract to H. W. Nicholes & Son, Atlanta, to erect residence; brick veneer; tile roof; vapor heat; hardwood floors; tiled bathrooms; cost \$3000; construction in progress.

Md., Baltimore.—O. P. Wallace let contract to Roland Park Co., Munsey Bldg., Baltimore, and Roland Park, Md., to erect dwelling at Guilford; 2½ stories; brick; 44x40 ft.; cost \$11,200; E. L. Palmer, Jr., Archt., 408 Roland Ave., Roland Park, Md.

Md., Baltimore.—A. M. Tyson let contract to Roland Park Co., Munsey Bldg., Baltimore, and Roland Park, Md., to erect dwelling at Guilford; 2½ stories; frame; 48x36 ft.; cost \$11,700; E. L. Palmer, Jr., Archt., 408 Roland Ave., Roland Park, Md.

Md., Baltimore.—Jackson Realty Co., 2906 Brighton St., will erect 4 two-story dwellings on Garrison Ave.; 2 will be 15x15.6 ft. and others 20x36.6 ft.; brick; cost \$10,000; Israel Silberstein, Archt. and Contr., 812 Equitable Bldg., Baltimore.

Md., Baltimore.—Jas. C. Fenbagen will expend (cost without mechanical equipment) \$16,500 to erect dwelling; 27x46 ft.; ordinary construction; slate roof; Lawrence H. Fowler, Archt., 347 N. Charles St., Baltimore; contract lately noted let to Willard E. Harn Co., Inc., 213 N. Calvert St., Baltimore.

Mo., St. Louis.—McPherson Development Co. let contract Bush-Burns Realty Co. to erect 3-story dwelling at 431 McPherson St.; cost \$19,000; Edward J. Lawler, Archt.; stationary vacuum cleaner; electric lights; 2 bathrooms, one finished in white Italian marble, etc.

Mo., St. Louis.—Wm. E. Baird let contract to A. G. Pasquier to erect 3-story dwelling at 6225 Aberdeen St.; cost \$7500.

Mo., St. Louis.—R. A. Burns let contract to Bush-Burns Realty Co. to erect 2-story dwelling at 5920 Berlin St., and 2-story dwelling at 2422 N. Euclid St.; cost \$8500; plans by C. J. Lawler.

N. C., Fuquay Springs.—Victor Wells let contract to Jones, Woodall & Black, Box 15, Fuquay Springs, to erect dwelling; cost \$3000.

N. C., Greensboro.—John A. Ricks let contract to erect residence Washington St. and Blandwood Ave.

S. C., Camden.—E. J. McLeod will expend \$3000 (cost without mechanical equipment) to erect dwelling; 33x35 ft.; 2 stories; ordinary construction; shingle roof; porches; electric wiring; general contract lately noted let to R. W. Mitcham, Camden; plumbing contract let to N. R. Goodale; all material purchased except mantels, tile and grates.

Tenn., Memphis.—J. B. Leonard let contract to C. E. Collett to erect 7-room residence at 1133 Faxon Ave.; brick; cost \$3250.

Tenn., Memphis.—Miss M. A. Palmer let contract to T. F. Moore to erect 2-story brick residence at 1738 Lawrence St.; cost \$4400.

Tenn., Memphis.—C. E. Smith let contract to J. N. Callahan to erect residence at 755 Harksdale St.; cost \$3000.

Tenn., Memphis.—C. E. Elgin let contract to J. W. Sanford to erect residence at 849 Jackson Ave.; cost \$3500.

Tex., Orange.—John Holcomb let contract to B. B. Works, Orange, to erect 6-room cottage on N. 15th St.

Va., Norfolk.—Chas. H. East let contract to East & Hobbs, Norfolk, to erect 2 apartment-houses on Redgate Ave.; 3 stories; brick; cost \$24,000.

Va., Portsmouth.—Wm. B. Thomas let contract to Jno. W. Hoffer to erect 2-story frame double house at 5th and Lincoln Sts.; cost \$3400.

GOVERNMENT AND STATE

Okl., Ardmore.—Federal.—Otto Bradford, Ardmore, has contract for work preliminary to construction of Federal building.

HOTELS

N. C., Charlotte.—W. C. Petty, Mgr. Mecklenburg Hotel, reported to have let contract to J. A. Gardner, Charlotte, to erect 5-story addition to hotel; to contain 50 bedrooms with bath.

S. C., Darlington.—Hotel Melrose let contract to J. M. Lawton, Darlington, to erect hotel; cost (without mechanical equipment), \$65,000; 50x100 ft.; 4 stories; ordinary construction; Johns-Manville roofing; steam heat; electric (knob and tube) lighting; Otis elevator, costing \$2000; subcontracts not let; H. W. Witcover, Savannah, Ga. (Lately noted.)

MISCELLANEOUS

Ark., Little Rock.—Market, etc.—City Market & Arcade Co. let subcontracts as follows for market and arcade: To United Refrigerating & Ice Machine Co., Kenosha, Wis., at \$21,525 for refrigerated boxes and counters; refrigerating plant and appurtenances, Vilter Mfg. Co., Milwaukee, Wis., at \$14,600 (exclusive of motors, etc.); cork insulation, Johns-Manville Co., St. Louis, Mo., at \$4957; Pfeiffer-Hinpsedt Co., Little Rock, for plumbing at \$6300 and for heating plant at \$12,000; electric wiring to Electric Construction Co., Little Rock, at \$8250; Otis hydro-pneumatic elevator costing \$2400; general contract let to Thalmann & Reed, Little Rock; contract for engineering and refrigerating work, Tait-Nordmeyer Engineering Co., St. Louis, Mo. (Previously noted.)

Md., Baltimore.—Hospital.—South Baltimore Eye, Ear, Nose and Throat Hospital, 1211 Light St., let contract to Henry Plerson & Sons, 1000 Olive St., to erect hospital building; 3 stories and basement; single pipe heating system; electric wiring and fixtures; electric elevators; 65x85 ft.; tile and composition roof; tile floor garden and sun parlor; laundry, dining-rooms, steam-heating apparatus in basement; offices, dispensary and waiting-rooms on first floor; 21 private rooms; baths and toilets and main operating suite on second floor; reported cost about \$38,000; Herbert Jory, Archt., 1408 Munsey Bldg., Baltimore. (Previously noted.)

Md., Baltimore.—Restaurant.—Nicholas Sakelos, 306 E. Baltimore St., let contract to Melver Construction Co., 7 Clay St., Baltimore, to remodel building at 308 W. Baltimore St. for restaurant; plans by Frank & Kavanaugh, 328 N. Charles St., Baltimore, call for lowering first floor to level of street, fixtures, front, etc. (Lately noted.)

Md., Havre de Grace.—Clubhouse, Grandstand, etc.—Harford County Agricultural & Breeders' Assn. is reported to have let contract to Killen & Brightley, Philadelphia, to construct grandstand, clubhouse, etc., to replace burned buildings, and to Phoenix Bridge Co., Phoenixville, Pa., for 150 tons of fabricated steel for grandstand.

St. Louis.—Restaurant.—Anheuser-Busch Brewing Assn. will erect restaurant building at 4907-11 Delmar Blvd.; 2 stories; cost without equipment, \$30,000; T. P. Barnett Architectural Co., St. Louis; J. H. Wise, Contr., St. Louis.

RAILWAY STATIONS, SHEDS, ETC.

Mo., Kansas City.—Mary B. Case let contract to erect building at 11th and Wyandotte Sts. to be occupied by Kansas City Southern Ry. Co. (See Bank and Office Buildings.)

SCHOOLS

N. C., West Raleigh.—Agricultural and Mechanical College Trustees let contract to J. G. Adams for brick work on greenhouse in rear of Patterson Hall.

Tenn., Ocoee.—Polk county let contract to Cleveland (Tenn.) Construction Co. to erect school; 3 stories; 60x60 ft.; cost (without mechanical equipment) \$5000; mill construction; pine shingle roof.

Tex., Fort Worth.—School Board let contract to J. P. Taylor Construction Co., Fort Worth, to erect Eighth Dist. School; cost \$50,000; Muller & Pollard, Archts., F. & M. Bank Bldg., Fort Worth. (Lately noted.)

Tex., Huntsville.—Sam Houston Normal School, H. F. Estill, Pres., let contract to Harry Allen to erect temporary building. (Lately noted to erect practice school and science building.)

STORES

D. C., Washington.—Miss Mary B. Johnston, 1704 Rhode Island Ave. N. W., let con-

tract to Richardson & Burgess to remodel store building at 1210 F St. N. W.; cost \$12,000; A. P. Clark, Jr., 816 14th St. N. W., Washington.

D. C., Washington.—Chas. A. Roussor let contract to Skinker & Garrett, Evans Bldg., Washington, to erect store at 804 K St. N. W.; cost \$5000; Geo. P. Hales, Archt., 1406 G St. N. W., Washington.

Fla., Punta Gorda.—E. E. Welsh, Eaton, O., has plans by and let contract to T. H. Myers, Eaton, O., to erect business building; 40x65 ft.; one story; cost (without mechanical equipment) \$3500; materials purchased. (Lately noted.)

Fla., Stuart.—Frank Coventry let contract to Mr. Spiers, Stuart, to erect store and apartment building; 2 stories; cost \$5000.

Ga., Atlanta.—C. C. McGhee let contract to Gude & Co., Atlanta, to remodel building; 30x105 ft.; 3 stories; cost (without mechanical equipment) \$5000; ordinary construction; tar and gravel roof; heating not decided; electric lighting; install Otis elevators to cost \$1000; Jno. C. Battle, Archt., Atlanta. (Lately noted.)

Ga., Albany.—Terminal Land Improvement Co. and Brown & Pope let contract to A. C. Knight, Albany, to erect business block; 200x80 ft.; ordinary construction; brick; plate glass and steel beams; tin roof; stoves; electric lighting to cost \$180; H. E. Nash, Archt., Box 305, Albany. (Lately noted as Terminal Hotel Co.)

Ga., Savannah.—J. Maril & J. Bernstein will expend \$40,000 (without cost of mechanical equipment) to erect store and office building; 90x90 ft.; 3 stories; white enameled brick; steel beams and cast-iron columns; tar and gravel roof; steam heat; electric lighting; freight and passenger elevators; W. A. Chaffee, Archt. and Contr., 209 Broughton St. E., Savannah. (Lately noted.)

Md., Baltimore.—Fineman & Goldsmith will remodel building at 318-20 W. Baltimore St.; install store front and make interior alterations; contract lately noted let to Edw. Watters & Co., 509 N. Charles St., Baltimore.

Md., Baltimore.—Samuel Rosenthal let contract to Charles L. Stockhausen, Marine National Bank Bldg., Baltimore, to erect store at 16, 18 and 20 S. Gay St.; 3 stories; brick and steel; 62x99 ft.; plans by Louis Levy; cost \$25,000.

Mo., Kansas City.—John Taylor will expend (cost without mechanical equipment) \$500,000 to erect department store; 120x150 ft.; 6 stories; fireproof construction; composition roof; heating and lighting from outside plant; character of sidewalks and elevator not determined; Holabird & Roche, Archts., Chicago, Ill.; general contract let to Selden-Breck Construction Co., St. Louis; no bids asked. (Lately described.)

Mo., St. Louis.—F. J. Cornwell, 810 Chest-

nut St., let contract to erect store and apartment building. (See Apartment-houses.)

Mo., St. Louis.—J. L. Freund let contract G. Murphy to erect one-story store at 3200 Easton St.; cost \$3000.

Mo., St. Louis.—F. W. Woolworth Co., Pierce Bldg., will expend (without mechanical equipment) \$15,000 to make alterations and improvements to 100x150-ft. building at 510-514 Washington Ave.; ordinary construction; J. Helz, Archt., address, care of F. W. Woolworth Co., Pierce Bldg., St. Louis; contract lately noted let to Murch Bros. Construction Co., St. Louis.

N. C., Fuquay Springs.—K. B. Johnson let contract to Jones, Woodall & Black, Box 15, Fuquay Springs, to remodel store; press brick and plate-glass front.

S. C., Columbia.—M. A. Malone let contract to J. C. Heslip, Columbia, to remodel store; ordinary construction; hot-water heat; freight hand-power elevator; Wilson & Sompayrac, Archts., Columbia; heating and plumbing contract let to W. B. Gumarin & Co., Columbia. (Lately noted.)

S. C., Columbia.—L. B. Owens let contract to E. C. Brown to erect store and apartment building; 25x68 ft.; cost (without mechanical equipment) \$5000; ordinary construction.

S. C., Florence.—John Keker let contract to R. L. Graveley, Box 516, Florence, to rebuild store recently burned; 2 stories; 50x125 ft.; tar and gravel roof; plate-glass front and side, vestibule, etc.; metal ceiling. (See Machinery Wanted.)

Tex., Dallas.—B. F. Wood and Wm. Charlton let contract to H. H. Gowing to erect addition to mercantile building; 25x75 ft.; cost (without mechanical equipment) \$4000; mill construction; gravel roof; J. O. Gill, Archt., Dallas; no other bids asked. (Lately noted.)

Tex., Madisonville.—A. Ylser will expend \$2000 (cost without mechanical equipment) to erect store; 27x100 ft.; composition roof; B. T. Poole, Archt., Madisonville; contract lately noted let to R. H. Wallace, Madisonville.

Tex., Madisonville.—Geo. L. Turner will expend \$3000 (cost without mechanical equipment) to erect store; 27x80 ft.; fireproof; Taylor's old-style roof; plans by owner; contract lately noted let to R. H. Wallace, Madisonville.

W. Va., Huntington.—M. Broh let contract to J. E. Berry to erect 3-story brick business building on 3d Ave.; 30x100 ft.; lower floor for 2 business buildings; upper floors for apartments. (Lately noted.)

WAREHOUSES

D. C., Washington.—Washington Wholesale Drug Exchange, 459 C St. N. W., let contract to W. P. Lipscomb & Co., 1405 F St. N. W., to remodel 4-story building; cost \$3900.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Birmingham.—Interurban Ry. Co. is reported to have made survey for an electric railway from Birmingham to Hale Springs, about 9 mi. Daniel P. Hale, Birmingham, is said to be interested.

Ala., Birmingham.—Alabama Great Southern Railroad has filed mortgage to secure \$25,000,000 of bonds (previously reported), of which about one-half will be used from time to time for extensions, double track and other work. There will be, it is said, 3 mi. built immediately at Chattanooga, and next 27 mi. of second track between York, Ala., and Meridian, Miss. C. Dougherty, Cincinnati, O., is Ch. Engr.

Ala., Huntsville.—J. E. Hurd, Ch. Engr. of the Tennessee & Alabama R. R., Fayetteville, Tenn., and others are reported to have submitted to the Huntsville Chamber of Commerce plans for the construction of a railroad from Fayetteville to Huntsville, about 35 mi.

Ala., Fairhope.—Mobile & Baldwin County R. R. has let contract for construction of 10 mi. of track south of Fairhope to J. M. Gills of Brewton, Ala. M. H. Miller is Pres. There are 25 mi. more to be built to Pensacola. Directors include W. B. Miller of Chicago, V-P.; J. O. Acree of Mobile, Treas.; J. N. Gills of Brewton, and John P. Lowell of Mobile, Secy.

Fla., Jacksonville.—Atlantic Coast Line, says a report, contemplates building a trestle over Trout Creek. E. B. Pleasants, Wilmington, N. C., is Ch. Engr.

Fla., Orlando.—J. H. Woodford of Atlanta and others reported interested in a plan to

build an electric interurban railway from Sanford via Orlando to Kissimmee, about 35 mi.

Ky., Central City.—Concerning report that Eastern capitalists propose to build electric railway from Central City to Brakesboro or Greenville, information received from Chas. Wells, Mayor, and George Wales, City Engr., says that the City Council has adopted a resolution granting to Louisville men representing Eastern capitalists the right to build a railway in Central City and an ordinance is to be passed. The road is also to extend to one of the two other two points mentioned.

Ky., Bowling Green.—Southern Traction Co., capital \$20,000, is reported to have applied for charter to build an electric railway in and near Bowling Green. Charles Roemer is Pres., J. S. Lewis V-P. and Gen. Mgr., Lon D. Hanes Secy., and Joseph W. Ford Treas.

Ky., Paducah.—Paducah & Illinois R. R. Co., proposing construction of a double-tracked railroad 12 mi. long from Paducah to a point on the Ohio River opposite Metropolis, Ill., is reported seeking right of way. T. E. Calvert, Chicago, Ch. Engr., Burlington Route, may give information.

Ky., Pikeville.—Concerning the Tag River & Kentucky R. R. Co., recently chartered by officers of the Norfolk & Western Ry., it is reported that its proposed line will be about 17 mi. long from the end of the Williamson & Pond Creek R. R. to Shelby Station on the Chesapeake & Ohio Ry. J. E. Crawford, Roanoke, Va., is acting Ch. Engr. of the Norfolk & Western.

La., Lake Charles.—Calcasieu Construction

Co. of Lake Charles will build approximately 120 mi. of standard-gauge railroad for the Orange & Northeastern Ry. Co. from Port Orange to Natchitoches via Vinton, Merryville, Leesville and Starks. Ed. Kennedy, Lake Charles, is Mgr., and T. H. Mandell is Chief Engr. Other officers are C. Brent Richard, Prest.; D. C. Powell, V.-P.; J. N. Wetherill, Treas., and L. L. Moss, Secy.

Miss., Meridian.—Meridian & Deepwater R. R. Co., it is reported, will resume construction of proposed line from Meridian, Miss., to Myrtlewood, Ala., 50 mi., as soon as extension of Meridian & Memphis R. R. into Meridian and terminal are completed. About 5 or 6 mi. of roadbed has been graded through rough country east from Meridian. S. A. Neville, Meridian, is V.-P.

Mo., Ava.—Kansas City, Ozarks & Southern Ry. Co. says it is rebuilding all bridges with concrete foundations and new timbers, besides putting in new ties as needed in the track. J. W. Byng is Gen. Mgr.

Mo., Helena.—Concerning recent press report that construction of a railway from St. Joseph to Helena, 16 mi. was contemplated and possibly to Pattonburg, 28 mi. more, President R. M. Bachelier, Commerce Club, St. Joseph, says that nothing has been done further than a conference with citizens along a suggested line between the two extreme points.

Mo., Mexico.—Concerning recent press report that the Chicago, Burlington & Quincy R. R. Co. contemplates building a cut-off line from Mexico to Carrollton, Mo., about 90 mi., it can be stated that the company has made surveys in the vicinity from time to time, but has done nothing more. W. L. Breckinridge, Chicago, is Engr., Maint. of Way.

N. C., Greensboro.—Greensboro, Northern & Atlantic Railway Co. has not finished engineering work for its proposed line from Greensboro, via Burlington and Graham, N. C., to connections with the Seaboard Air Line and the Norfolk Southern, including a branch from Graham or Burlington to Danville, Va., altogether 99 mi. There will be from 8 to 10 steel bridges required. Directors are T. W. Troy, Prest.; J. W. Fry, 1st V.-P. and Treas., both of Greensboro, N. C.; R. A. James, 2d V.-P., Danville, Va.; C. M. Benbow, A. W. McAllister, R. C. Hood, A. L. Brooks, J. H. Kimball and Garland Daniels, all of Greensboro; John Q. Gant, Eugene Holt and J. N. Williamson, Jr., all of Burlington, N. C.; W. E. White of Graham, N. C., and A. B. Carrington and W. R. Fitzgerald of Danville, Va. M. W. Thompson is Secy. and Walter Washabaugh is Ch. Engr.

N. C., Selma.—Atlantic Coast Line has let contracts for construction of second track from Selma to Parkton, N. C., 62 mi., thus: Sections 1 and 2, to W. Z. Williams & Co. of Macon, Ga.; section 3 to C. W. Lane & Co. of Atlanta, Ga.; section 4 to J. L. Shehan of Elkton, Tenn.; section 5 to A. & C. Wright of Elkton; work to begin immediately and be completed by next autumn.

N. C., Stackhouse.—Gulf & Bay R. R. Co.'s proposed line from Belva via White Rock to Carmen, N. C., 10 mi., will include 19 small trestles. Maximum grade 2 per cent.; maximum curve 17 deg. A. G. Betts of Stackhouse is Prest. and W. N. Garrett of Hot Springs is Chief Engr. and Secy.

Okla., Ardmore.—Jake L. Hamon, V.-P. and Gen. Mgr., Oklahoma, New Mexico & Pacific Ry., Lawton, Okla., says its line will be extended from Wilson to Lawton, 80 mi., through rolling country, contract to be let soon. Route via Comanche and Walters. John Ringling of New York is Prest., and Geo. W. Rider, Ardmore, Okla., is Chief Engr.

Tenn., Chattanooga.—Prest. Fairfax Harrison of the Southern Railway is quoted saying that double track will be built from the Chattanooga terminal to Wauhatchie, surveys having been made. W. H. Wells, Washington, D. C., is engr. of construction.

Tex., Amarillo.—F. T. Burnham, Prest. Texas, Kansas & Omaha Ry. Co., Dwight Bldg., Kansas City, Mo., says it proposes to build 100 mi. line from Amarillo to Texhoma, including a bridge 1500 ft. long over Canadian River. W. H. Fuqua is Treas. and C. B. Pash, Secy., both of Amarillo, Tex. Others interested are J. L. Williams of Texhoma, Okla., and R. E. Underwood of Amarillo.

Tex., Childress.—The Commercial Club, M. A. Weslow, Secy., is reported working on a plan to secure construction of a railroad from Childress to Mangum, Okla., 6½ mi.

Tex., Fort Worth.—Fort Worth Belt Ry. Co. has been granted franchise to build an extension along North Commerce St. from the Frisco R. R. to 2d St., less than a mile. W. B. King is V.-P. and Gen. Mgr.

Tex., Galveston.—Stockholders of the Galveston, Houston & Henderson Railroad Co. have voted to issue \$5,000,000 of bonds, of which \$2,000,000 will be used for refunding. It is reported that part of the remainder will be devoted to improvement work. J. H. Hill is V.-P. and Gen. Mgr.

Tex., Houston.—Relative to the report that the International & Great Northern R. R. Co. would make extensive repairs to 75 mi. of line as a result of recent flood damages, the company says that the roadbed will be repaired only to restore it to its original condition and nothing will be added. O. H. Crittenden is Ch. Engr.

Tex., San Antonio.—W. B. Tuttle reported to the annual meeting of the proposed San Antonio & Austin Interurban Ry. that location had been completed. Active work toward financing and building the line will now be undertaken. Vories P. Brown is Prest.; W. P. Tuttle, H. G. Henne, W. G. Barber and A. J. Eilers V.-Ps.; S. C. Bell Secy., and J. D. Oppenheimer Treas., these composing the board of directors.

Tex., Yoakum.—U. G. Dotson, Prest. Palacios, San Antonio & Pecos Valley Ry. Co., says it is planning to build from San Angelo to Aransas Harbor via New Braunfels and Yoakum, Tex., but beyond this it has nothing to announce at present. A. B. Thruston is Ch. Engr.

Va., Abingdon.—Climax Mountain & Southern R. R. Co. is chartered; capital \$100,000 to \$300,000. R. J. Armstrong of Philadelphia is Prest. and H. E. Widener of Abingdon, Va., is Secy.

W. Va., Seth.—Chesapeake & Ohio Ry., it is reported, contemplates an extension from Seth southeast to the mouth of Clear Fork, about 13 mi. F. I. Cabell, Richmond, Va., is Chief Engr.

W. Va., Grafton.—Grafton Traction Co. is reported contemplating extension to Fairmont or Clarksburg. G. L. Hartley is supt.

W. Va., Wheeling.—Wheeling & Eastern R. R. Co. of Wheeling is chartered with \$1000 capital to build a line from Short Creek, in Brooke county, to near Potomac Creek, in Ohio county, W. Va.; incorporators, R. L. Rosenbloom, R. T. Manning, M. E. McGreal, Geo. A. Feeny and B. J. Smith of Wheeling.

STREET RAILWAYS

Ark., Little Rock.—A. C. Read is reported saying that Ledwidge & Cammack have grading contract, and that the Little Rock Ry. & Elec. Co. will build the proposed Biddle extension of its street railway.

Fla., West Palm Beach.—H. G. Geer is reported to have submitted plans at a meeting of the Board of Trade for the construction of a street railway.

Ga., Covington.—Covington & Oxford Street Ry. Co. is reported preparing plans to build an extension of 3 mi. to its line which now connects Covington and Oxford. E. W. Fowler is Prest.

Ga., Valdosta.—Valdosta Street Ry., says a report, has let contract to the West Construction Co. of Chattanooga to rebuild its line on Patterson St. W. S. West is Prest. of the railway.

La., New Orleans.—New Orleans Ry. & Light Co., it is reported, will build 7 mi. of lines this year. Hugh McCloskey is Prest. and L. C. Datz Engr.

N. C., Raleigh.—Carolina Power & Light Co., says a report, is planning an extension into Boylan Heights. H. H. Carr is V.-P. and Gen. Mgr.

W. Va., Elkins.—Elkins Electric Railway, says a report, will build an extension between Harding and Roaring Creek Junction, 1 mi.

The Graton & Knight Belting Manual.

Much information regarding the care of belting, including the different kinds of belt dressing, directions for making double belts endless and for lacing belts with the various kinds of latches is contained in the "Belting Manual" recently issued by the Graton & Knight Manufacturing Co., Worcester, Mass. This is practically a new edition of the company's "Care of Belting" book, with the information contained in that book extensively elaborated upon. The new features incorporated include additional mechanical rules and tables, new rules for lacing belts, suggestions for ordering belting, how to get the best belt for special conditions, and a comparison of various forms of power transmission. The "Belting Manual" may be obtained by belting buyers, shop managers, foremen and other prospective purchasers on request to the company.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Air Compressors.—See Water-works Machinery.

Bakery Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on bakery equipment.

Boiler.—Box 478, Selma, Ala.—Second-hand 30 H. P. stationary boiler, complete; also skids. (See Skids.)

Boiler.—McA. McManus, Andrews, S. C.—Boiler. (See Engine and Boiler.)

Bottling Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on bottling machinery.

Brick.—J. J. Huddleson, Algoma, W. Va., Mgr. Modoc Coal Mining Co.—Prices on brick. (See Mining Equipment, etc.)

Brick Machinery.—Richmond Heating & Plumbing Co., Clay Bldg., W. Main St., Richmond, Ky.—Prices on new or second-hand brick machinery; latter preferred.

Brick.—See Sewer System Materials.

Bridge Construction.—Talbot County Commrs., Jos. B. Harrington, Clerk, Easton, Md.—Bids until Feb. 17 to construct 2 concrete bridges along Peachblossom Rd.; 500 ft. and 300 ft. long; concrete or protected wood pile foundation; blank forms of proposals at office of State Roads Com., Garrett Bldg., Baltimore.

Bridge Construction.—Brazoria County Commrs., J. W. Munson, County Judge, Angleton, Tex.—Bids until March 2 for repairing bridge recently damaged in flood; bidders must go upon ground, make examination and soundings, furnish plans and specifications.

Buckets (Wooden).—Stevens Bros. & Co., Stevens Pottery, Ga.—Addresses of manufacturers of wooden buckets.

Building Materials.—Chas. Terry, Jackson, Ky.—Prices on brick, lumber, doors, windows, roofing, etc.

Building Materials.—Albert B. Jewett, 226 State Bank Bldg., Little Rock, Ark.—Catalogues and samples of building materials of interest to architects; also to meet manufacturers' representatives.

Building Materials.—Bonfoey & El-Hott, Tampa, Fla.—Prices on reinforcing steel, common clay brick, face brick, exterior granite and limestone, exterior terra-cotta, cornices, trimmings, etc.; interior marble, tile and mosaic floors, sanitary monolith, hydrolith or marbleoid floors and base, fireproof partitions (gypsum block or patent system), interior trimmings (oak or birch), fireproof stairs (equal to marble) and monumental iron, mail chute, detention cells and tower clock for \$325,000 city hall.

Building Materials.—J. S. Redwine, Jackson, Ky.—Prices on front girders and fireproof windows.

Butter Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on butter worker.

Candy Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on candy machinery.

Canning Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on canning and preserving machinery.

Canning Machinery.—John W. Heath, Kelly, N. C.—Data and prices on canning equipment, including cans.

Cans.—Liberty Perch Pole Co., R. E. Johnson, Prest., Liberty, N. C.—Prices on 1-pt oil cans.

Canning and Preserving Machinery.—Old Virginia Orchard Co., Front Royal, Va.—Correspondence with manufacturers of machinery to manufacture fruit butters, preserves, jellies and canned goods.

Cement.—See Sewer System Materials.

Cement.—Doullut & Williams, American National Bank Bldg., Shreveport, La.—4000 bbls. Portland cement. (See Levee Construction Materials.)

Cement.—Summerfield Milling Co., D. L. Wright, Mgr., Summerfield, N. C.—Prices on cement.

Cement.—J. J. Huddleson, Algoma, W. Va., Mgr. Modoc Coal Mining Co.—Prices on cement. (See Mining Equipment, etc.)

Cement.—U. S. Engr. Office, J. P. Jervey, Maj., Engrs., Wheeling, W. Va.—Bids until Feb. 19 to furnish and deliver 2500 barrels American Portland cement for dam No. 26, Ohio River. Information on application.

Clock.—See Building Materials.

Cold-storage Machinery, etc.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on cold-storage or iceless refrigeration.

Condensers.—See Water-works Machinery.

Conveyors.—Pineville Coal Co., Pineville, Ky.—Retarding conveyors. (See Mining Machinery.)

Crusher.—Doullut & Williams, American National Bank Bldg., Shreveport, La.—Rock crusher. (See Levee Construction Materials.)

Crushers.—Sterling Machinery Co., Hudson Terminal Bldg., 30 Church St., New York.—One 13x24, one 6x20 and one 10x16 Farrel "B" crushers.

Crushing Machinery.—McTighe, Hughey & McTighe, Hazlehurst, Miss.—Prices on new or second-hand portable rock crushers.

Dredge.—Atlantic Engineering Co., 614 Germania Bank Bldg., Savannah, Ga.—¾-yd. to 1½-yd. second-hand floating dipper dredge, good condition, with power bank spuds, for use Southern east coast of Florida. Name price, condition and location, first letter.

Dredging.—U. S. Engr. Office, Eveleth Winslow, Lieut.-Col. Engrs., Norfolk, Va.—Bids until Feb. 20 to dredge inland waterway from Norfolk, Va., to Beaufort Inlet, N. C. Information on application.

Dry Kiln.—Box 478, Selma, Ala.—Dry kiln (standard preferred) of 10,000 to 15,000 capacity; second-hand.

Electric Cable, etc.—Isthmian Canal Com., F. C. Boggs, Maj., General Purchasing Officer, Washington, D. C.—Bids until Feb. 6 for electric cable, conduit and fittings, and miscellaneous electrical apparatus; steel shapes and plates, steel reinforcing bars, valves, manifold books, cardboard and paper. Blanks and general information relating to circular No. 821 may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 614 Whitney-Central Bldg., New Orleans, and 1086 North Point St., San Francisco; also from U. S. Engr. offices in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City, Mo.; Chamber of Commerce, Quincy, Ill., and Commercial Club, Tacoma, Wash.

Electric Plant.—City, L. C. Stark, Mayor, Hardin, Ky.—Bids on complete water-works and light plant for 15,000 population (See Water-works.)

Electric Plant Equipment.—Municipal Electric-light Plant, O. S. Anderson, Engr., Ruleville, Miss.—Prices on ten 25-ft. poles; one 1-K. W. and one 4-K. W. transformers; 3000 ft. 10-W. P. wire; ten 4-pin cross-arms; ten 2-pin cross-arms.

Electrical Machinery.—See Engine, Eastman, Ga.

Electrical Machinery.—Pineville Coal Co., Pineville, Ky.—Electrical equipment for coal mines. (See Mining Machinery.)

Electrical Machinery.—Duffy Electric Mattress Factory (Wm. Duffy, Propr.), 922 N. Pine St., San Antonio, Tex.—Prices on motors for mattress factory.

Electric Wiring, etc.—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C.—Bids until Feb. 17 for conduit and wiring system and lighting fixtures at U. S. postoffice at Sedalia, Mo., in accordance with drawings and specifications, copies of which are obtainable at office of

custodian at site or at this office at discretion of supervising architect.

Elevator.—Carolina Bagging Co., Henderson, N. C.—Passenger elevator for 2-story building; second-hand, good condition preferred.

Elevator.—R. L. Graveley, Box 546, Florence, S. C.—Prices on hand-power automatic elevator.

Engine.—Eastman Light & Ice Co., W. E. Davison, Mgr., Eastman, Ga.—Prices on 200 K. W. direct-connected tandem compound Corliss engine to 2300 volts, 60 cycles, 3 phase outfit.

Engine and Boiler.—McA. McManus, Andrews, S. C.—Sawmill engine, boiler, etc.

Engines (Gasoline).—See Fire Apparatus, Hastings, Fla.

Engines.—See Water-works Machinery.

Farming Implements.—John W. Heath, Kelly, N. C.—Combination cultivator, disk hoes and spring teeth for harrow.

Felt.—Liberty Perch Pole Co., R. E. Johnson, Prest., Liberty, N. C.—Prices on felt, 1/4 in. thick and 46 in. long, in strips cut 3/4 in. wide.

Fire Apparatus.—Comms., Waco, Tex.—Bids opened Feb. 17 for combination pump and wagon, automobile type, capacity not less than 700 gals. per min.; bidders to state capacity and size of engine, kind of motor and H. P.; also on 3000 ft. 2 1/2-in. cotton rubber-lined hose; Thos. A. Caulfield, Commr. of Finance.

Fire Apparatus.—J. B. Hughes, member Fire Committee, Hastings, Fla.—Gasoline engine fire-fighting equipment, with hose reels and hose engine to be connected to artesian wells.

Fire Apparatus.—Mayor (S. E. Miller) and Alderman, Johnson City, Tenn.—Bids until Feb. 5 for motor-driven fire engine, complete, delivered f. o. b.; bids to show complete, detailed specifications of car and pump, with lists of chemical hose and tanks, water hose, etc.; Wm. R. Ponder, Recorder.

Fire Hose.—Executive Board, Charlotte, N. C.—Bids until Feb. 4 for 500 ft. (more or less) 2 1/2-in. internal diam. fire hose, guaranteed to stand 400 lbs. pressure per sq. in. when delivered; prices f. o. b. Charlotte; A. H. Wearn, City Clerk.

Furniture (Church).—W. A. Rayfield & Co., Church Archts., Echols-Strong Bldg., Birmingham, Ala.—List of addresses of church furniture companies.

Gas (Compressor) Station.—Huntington Development & Gas Co., John J. Nash, Engr., 102 Robson-Prichard Bldg., Huntington, W. Va.—Data from manufacturers relative to gas compressor station to cost about \$250,000.

Gasoline Tanks.—Engineering Dept., U. S. Army, Jos. E. Kuhn, Lieut.-Col., Corps Engrs., Washington, D. C.—Bids until Jan. 31 to furnish two 370-gal. gasoline tanks and accessories; each tank shall be 36 in. in diam. and 7 ft. long between heads (inside dimensions), made of 5-16-in. plates on sides and ends with 5/16-in. rivets, placed 1 1/4 in. between centers; tank to have one longitudinal seam. Information on application.

Glass (Art).—W. A. Rayfield & Co., Church Archts., Echols-Strong Bldg., Birmingham, Ala.—List of addresses of art glass companies.

Glass Jars.—Stevens Bros. & Co., Stevens Pottery, Ga.—Addresses of manufacturers of glass jars.

Glove Machinery and Supplies.—J. C. Dellinger, 1711 12th St., Hickory, N. C.—Correspondence with manufacturers of sewing machines and supplies and fixtures for manufacturing canvas gloves.

Grist Mill.—Box 478, Selma, Ala.—22-in. or 24-in. grist mill; second-hand.

Heating Plant.—J. M. Cape, San Marcos, Tex.—Prices on steam heating plant for 78x80-ft. building.

Heating Plant.—Bonfoey & Elliott, Tampa, Fla.—Prices on thermostatic control gas heating system for \$325,000 city hall.

Hose (Fire).—See Fire Apparatus, Waco, Tex.

Ice-cream Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on ice-cream machinery.

Ice Machinery.—Crystal Ice & Cold-storage Co., Box 638, Etowah, Tenn.—Bids until Feb. 16 to furnish refrigerating machinery for 10-ton raw water ice plant; 7 1/2-ton plant also considered; bidders specify size or motors (2) to drive machinery; prices f. o. b. Etowah.

Laundry Machinery.—J. H. Watt, McDonald, W. Va.—Addresses of steam laundry supply companies.

Levee Construction Materials and Supplies.—Doullut & Williams, American National Bank Bldg., Shreveport, La.—Bids on following approximate quantities materials for Red River bank protection work: 42,000 ft. B. M. lumber, any variety suitable for mattress for bank protection work; 3000 tons rock, not less than 135 lbs. to cu. ft.; 4000 barrels Portland cement; 400,000 sq. ft. reinforcement material of wire fabric type; rock crusher; centrifugal sand pump; rope, wire, nails, etc. (Other bids previously noted.)

Lumber.—Doullut & Williams, American National Bank Bldg., Shreveport, La.—42,000 ft. B. M. lumber. (See Levee Construction Materials.)

Lumber.—J. J. Huddleson, Algoma, W. Va., Mgr. Modoc Coal Mining Co.—Prices on finished lumber. (See Mining Equipment, etc.)

Lumber.—Board of Port Comms., Robt. G. Guerard, Prest., 200 New Orleans Court Bldg., New Orleans, La.—Bids until Jan. 30 to furnish and deliver untreated lumber for period of 1 year, beginning Feb. 1; specifications at office of Saml. Young, Engr., 200 New Orleans Court Bldg., New Orleans.

Machine Tools.—Robt. B. Smith, Lexington, Neb.—Prices on combined stake and riveter, double head 36-in. stake, and 37-in. square shear with 15-in. gap to shear 3/4 or less; new or second-hand.

Machine Tools.—Navy Dept., Bureau of Supplies and Accounts, T. J. Cowie, Paymaster-Gen., Washington, D. C.—Bids until Feb. 10 for quantity of machine tools, de-

Mining Machinery.—Mill Creek Cannel Mining Co., F. M. Wattles, Mgr., Charleston, W. Va.—Receiving bids on mining equipment; plant at Villa.

Mining Machinery.—Pineville Coal Co., Pineville, Ky.—Probably open bids about March 15 for retarding conveyors, shaker screens, electrical machinery, etc., for 1500 tons daily capacity.

Motor-cycle.—W. Emmett Johnson, Atkinson, N. C.—Second-hand motor-cycle.

Nails.—Summerfield Milling Co., D. L. Wright, Mgr., Summerfield, N. C.—Prices on nails.

Oil, etc.—Liberty Perch Pole Co., R. E. Johnson, Prest., Liberty, N. C.—Prices on oil of cedar in 10-gal. lots; also solution of cresol compound.

Oil-extracting Machinery.—Wilhelm Wehe, care Cotton BI-Products Co., Box 160, San Antonio, Tex.—Chemical oil extraction machinery. (See Paper Mill Machinery, etc.)

Paper Mill Machinery, etc.—Wilhelm Wehe, care Cotton BI-Products Co., Box 160, San Antonio, Tex.—Addresses of manufacturers of paper mill, chemical oil extraction and fiber separating machinery.

Paving, etc.—Dept. Public Finance, A. G. Ricks, Commr., New Orleans, La.—Bids until Feb. 2 to pave Lowerline St. from Commercial to Esther St. with pitch lake asphalt; also construct sub-surface drainage, culverts, curbs, gutter bottoms and sidewalks on same street; blank forms of proposals furnished by City Engr.

FOR the benefit of business concerns, engineers, contractors, machinery manufacturers, dealers and others who find it profitable to follow up daily the industrial, commercial, railroad and financial development of the South and Southwest as published in this Construction Department,

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Livery Navy-yard. Portsmouth, N. H.; Sched. 6283; blanks on application to navy pay office, Portsmouth, or to bureau.

Marble, Tile and Terrazzo Work.—See Plumbing, etc.

Mattress Machinery.—Duffy Electric Mattress Factory (Wm. Duffy, Propr.), 922 N. Pine St., San Antonio, Tex.—Prices on mattress machinery.

Metal Shelving.—Treasury Dept., Oscar Wenderoth, Supervising Archt., Washington, D. C.—Bids until Jan. 30 to install metal vault shelving in U. S. public building at Eagle Pass, Tex.; until Jan. 28 to install metal shelving in U. S. public building at Greenwood, Miss. Information on application.

Metal Work.—U. S. Engr. Office, J. C. Oakes, Maj., Engrs., Louisville, Ky.—Bids until Feb. 21 for metal work for wickets, dam No. 48, Ohio River; also receives bids until Jan. 31 for fabrication and delivery of metal work for emergency dam at lock No. 41, Ohio River. Information on application.

Mill Work.—J. J. Huddleson, Algoma, W. Va., Mgr. Modoc Coal Mining Co.—Prices on doors, frames and windows. (See Mining Equipment, etc.)

Mining Equipment, etc.—Modoc Coal Mining Co. (of Bramwell, W. Va., with plant at Springton, W. Va.)—Finished lumber, cement, brick, tippie machinery, mine cars, doors, frames and windows. Address J. J. Huddleson, Mgr., Algoma, W. Va.

Paving.—City of DeQuincy, La.—Bids until Feb. 10 to construct about 82,000 sq. ft. concrete sidewalk and 18,000 lin. ft. curb; plans and specifications, on request, from Mayor or T. H. Mandell, Engr., Lake Charles, La.

Paving.—City of Corsicana, Tex., J. A. Harper, Secy.—Bids on 24,251 sq. yds. street paving, with concrete curbs and gutters; information with Daily Courier Light, Corsicana.

Paving, etc.—Board of Awards, John Hubert, Acting Prest., Baltimore, Md.—Bids until Feb. 4 to grade, curb, pave and repave with sheet asphalt, vitrified block and granite block on concrete base following streets: Contract No. 77, portions of Oliver St., Trenton St. and Morton Al., vitrified block, 820 sq. yds., and granite block repaving, 800 sq. yds.; contract No. 78, portions of Harlem Ave., Franklin, Mulberry, Lexington and Calhoun Sts., sheet asphalt, 50,300 sq. yds., and vitrified block, 5500 sq. yds.; portions of Fremont and Paca Sts., vitrified block, 16,000 sq. yds., and granite block, 3400 sq. yds.; R. Keith Compton, Chmn. of Paving Com. and Consult. Engr.

Paving.—Houston, Tex., E. E. Sands, City Engr.—Bids until Jan. 31 to pave Lee St. from Hardy to Clark Sts.; cost \$500.

Paving.—City of Lufkin, Tex.—Bids for paving on 1st St., streets around city park and on Lufkin Ave.; about 3300 cu. yds. excavation, 3900 lin. ft. curb and gutters and 9930 sq. yds. pavement; foundation 5-in. con-

crete, according to standard paving specifications; gutter, 2 ft. by 5 in.; concrete curb, not less than 5 in. thick; 2-in. rock asphalt surface or other bituminous substance; P. A. McCarthy & Sons, Engrs.

Paving.—City of Fort Worth, Tex.—Bids by F. J. Von Zuben, City Engr., until Feb. 3 for paving about 2100 sq. yds. on College Ave., 2300 sq. yds. on Terrell and 4600 sq. yds. on Jennings; vitrified brick (vertical fiber), bitulithic, bituminous macadam or vibroolithic pavement; also bids to furnish and lay about 900 ft. vitrified storm sewer in Jennings Ave. and 10th St.; specifications at office of City Engr.

Peanut Machinery.—Producers' Exchange and Clearing-house, Nashville, Ark.—Prices on peanut cleaner and sheller.

Piping.—Kingwood Water Co. (Mentor Hetzer to be addressed), Moundsville, W. Va.—Prices f. o. b. Kingwood, W. Va., on 4500 ft. 6-in. and 10,000 ft. 4-in. cast-iron pipe.

Piping.—City of Columbia, S. C.—Bids until Feb. 3 for material and construction of water mains and appurtenances in North Columbia, Shandon and Waverly; plans and specifications with F. C. Wyse, Engr.-Supt.; about 11,657 ft. 6-in., 781 ft. 8-in., 380 ft. 10-in. and 1432 ft. 12-in. pipe, with 71 valves and 37 fire hydrants.

Plumbing, etc.—Dept. of the Interior, Lewis C. Laylin, Asst. Secy., Washington, D. C.—Bids until Feb. 17 to furnish all labor and material (unless otherwise specified) for installing plumbing, marble, tile and terrazzo work in rooms 127, 229, 232, 305, 327 and 355 in old postoffice building, Washington, D. C., in accordance with plans and specifications obtainable on application to Chief Clerk of Dept.

Poles.—Liberty Perch Pole Co., R. E. Johnson, Prest., Liberty, N. C.—Correspondence with manufacturers with view to placing contract for chicken poles; specifications on application.

Printing Equipment.—H. M. Woods, City Hall or P. O. Box 318, Savannah, Ga.—Used or second-hand newspaper outfit; also job and printers' supplies; first-class condition.

Preserving Machinery.—See Canning and Preserving Machinery.

Pump (Sand).—Doullut & Williams, American National Bank Bldg., Shreveport, La.—Centrifugal sand pump. (See Levee Construction Materials.)

Pump.—National Machinery & Wrecking Co., 1916 Seranton Rd., Cleveland, O.—Water pump; capacity at least 1,000,000 gals. daily; steam or electric power; give details with price first letter.

Pumps.—See Water-works Machinery.

Pumping (Gas) Station.—See Gas (Compressor) Station.

Reinforcing.—See Building Materials.

Reinforcement (Wire Fabric).—Doullut & Williams, American National Bank Bldg., Shreveport, La.—400,000 sq. ft. reinforcement material of wire fabric type. (See Levee Construction Materials.)

Riveter.—See Machine Tools.

Road Construction.—Leflore County Suprs., A. R. Bew, Clerk, Greenwood, Miss.—Bids until Feb. 2 to improve Mississippi Post Rd., under supervision of U. S. Office of Public Roads, H. H. Lotter, Senior Highway Engr.; Greenwood to Carroll county hills, 8 (or 5) mi.; Greenwood to Shellmound, 9.71 mi.; Lucas Gin to Ita Bena, 6.38 mi.; grading and macadam, gravel or bituminous surface; plans and specifications at office of Chancery Clerk.

Road Construction.—State Roads Com., O. E. Weller, Chmn., 601 Garrett Bldg., Baltimore, Md.—Bids until Feb. 10 to build 5 sections State highway, about 19.05 mi., as follows: Anne Arundel county, 4.10 mi. macadam or gravel between Annapolis and South River; Charles county, 4.32 mi. concrete or gravel between Brytown and Hughesville; Frederick county, 2 mi. resurfacing from Middletown 2 mi. west; Kent county, 1.31 mi. macadam or concrete between Galena and Georgetown; Wicomico county, 6.72 mi. macadam, concrete or bituminous concrete between Parsonsburg and Worcester county line; amounts approximate; specifications and plans on application.

Road Construction.—St. Johns County Commrs., W. Wallace Snow, Clerk, St. Augustine, Fla.—Bids until Feb. 24 to furnish labor and material in paving with asphalt macadam, concrete, vitrified paving brick or other suitable material 64 mi. (more or less) John Anderson Highway; 9 ft. wide from outside to outside of 4x10-in. concrete curbing; bids to be with or without 5-year maintenance bond; copies of blank pro-

posals, specifications, etc., obtainable from Clerk, or A. F. Harley, Constr. Engr., Jacksonville, Fla.

Road Machinery.—Shenandoah County Commrs., Mark B. Wunder, Clerk, Woodstock, Va.—Bids until Feb. 9 on complete road-building equipment, including mounted rock crusher, about 12x18-in. jaw opening, best quality dies, 15 to 30 tons capacity per hour, equipped with elevator and revolving screen (30 to 32 in. by 9 ft.); mounted portable telescopic bin of 20 to 25 tons capacity; 10-ton steam road roller, with complete equipment; 450-gal. sprinkler.

Road Construction.—Talbot County Commrs., Jos. B. Harrington, Clerk, Easton, Md.—Bids until Feb. 17 to construct portion of State-aid highway along Peachblossom Rd., distance 1½ mi.; blank forms of proposals obtainable from State Roads Com., Garrett Bldg., Baltimore.

Roofing.—See Building Materials.

Roofing, etc.—Summerfield Milling Co., D. L. Wright, Mgr., Summerfield, N. C.—Prices on metal siding and roofing.

Roofing.—H. J. Cook, 1121 Circle Park, Knoxville, Tenn.—Interested in fireproof roof for dwelling; considering flat tiles of light weight, prices laid; also considering asbestos tile shingles with some method of giving relief from flat surface.

Rock.—Donlitt & Williams, American National Bank Bldg., Shreveport, La.—3000 tons rock. (See Levee Construction Materials.)

Sawmill Equipment.—See Engine and Boiler, Andrews, S. C.

Screens.—Treasury Dept., Oscar Wendroth, Supervising Archt., Washington, D. C.—Bids until Feb. 3 to install screens in U. S. public buildings at McKinley, Tex.; until Feb. 2 to install door and window screens in U. S. public buildings at Ferdinandina, Fla. Information on application.

Screens (Coal).—Pineville Coal Co., Pineville, Ky.—Shaker screens for coal mine. (See Mining Machinery.)

Separating (Fiber) Machinery.—Wilhelm Wehe, care Cotton Bi-Products Co., Box 169, San Antonio, Tex.—Fiber separating machinery. (See Paper Mill Machinery, etc.)

Sewers.—Board of Awards, John Hubert, Acting Pres., Baltimore, Md.—Bids until Feb. 4 to construct sanitary sewers, contracts Nos. 125, 127 and 129; contract No. 125 requires 5525 lin. ft. 36 in. and 370 lin. ft. 33 in. diam. sewers, 15,685 cu. yds. earth excavation, 680 cu. yds. rock excavation and 4990 lin. ft. piles; contract No. 127, 1337 lin. ft. 36 in. and 3161 lin. ft. 27 in. diam. sewers, 6297 cu. yds. earth excavation, 752 cu. yds. rock excavation and 1990 lin. ft. piles; contract No. 129, 20,250 lin. ft. 8 in. to 10 in. sewers and 12,050 lin. ft. house connections; plans and specifications at office of Calvin W. Hendrick, Chief Engr. of Sewerage Com.; plans and specifications at office of Com., 904 American Bldg.

Sewer Construction.—See Paving, Fort Worth, Tex.

Sewer System Materials.—Board of Public Works, J. L. Zachry, City Engr., Brunswick, Ga.—Bids until Feb. 10 to furnish 26,000 hard-burned brick, 60 barrels Portland cement, 4000 ft. 4 in., 7000 ft. 8 in., 200 ft. 10 in., 450 ft. 12 in. and 200 ft. 15 in. first-class salt glazed vitrified sewer pipe with necessary Y and T branches.

Sewerage Disposal Plant.—R. E. Gilmore, Box 417, Post City, Tex.—Catalogues and prices on sewerage disposal apparatus.

Sewing Machines.—See Glove Machinery and Supplies.

Shears (Machine).—See Machine Tools.

Skids.—Box 478, Selma, Ala.—Second-hand 30-H. P. portable boiler skids or wheels. (See Boiler.)

Spools.—W. Berry Caution, Box 238, Lancaster, S. C.—Addresses of manufacturers of small spools.

Spray (Orchard).—John W. Heath, Kelly, N. C.—Spray for young orchard of 200 or more trees.

Steel Rolling Machinery.—J. Flomerfelt, Taft, Fla.—Machinery to roll steel for making steel railroad ties; flats for slides.

Steel Bars, etc.—See Electric Cable, etc., Isthmian Canal Com.

Tile (Roofing).—J. A. G. Co., care Manufacturers Record, Baltimore, Md.—Prices, catalogues, etc., from manufacturers of roofing tile; view to Southern or Georgia representation.

Water-works.—City of Ville Platte, La., A. A. Laverne, Mayor.—Bids until Feb. 12 for water-works costing about \$20,000; tank and pipe; motor-driven turbine pump; concrete reservoir, daily capacity 40,000 gals.; use power and well of ice factory; Engr., W. B. Robert, Opelousas, La.

Water-works and Lighting Plant.—City, L. C. Stark, Mayor, Hardin, Ky.—Bids on complete light plant and water-works for 15,000 population. (See Electric Plant.)

Water-works Machinery.—C. W. Fassett, City Clerk, El Paso, Tex.—Bids until Feb. 12 for water-works machinery as follows: Steam-driven air compressor, 4000 to 5000 ft. per minute capacity; steam-driven crank and fly-wheel, outside center packed plunger pump, capacity 4,000,000 to 5,000,000 gals in 24 hours; 2 water tube boilers, 120 to 200 H. P. each; surface condenser, capacity 15,000 lbs. of steam per hour; 2 or more internal combustion engines of sufficient power to drive compressors and pumps; 1 or more air compressors, 3000 to 4000 cu. ft. total capacity; 1 or more power pumps of 3,000,000 to 4,000,000 gals. capacity or in lieu of power pump; 1 or more centrifugal pumps of same capacity as power pumps; copies of specifications at offices of F. H. Todd, Consult. Engr. of city, and Will E. Race, Supt. of Water-works, 420 Mesa Ave., El Paso.

Well-drilling Equipment.—White Point Oil & Gas Co., L. R. Clarkson, Secy., 621 Mesquite St., Corpus Christi, Tex.—Prices on 4, 6, 8 and 10-in. line pipe and 4 and 6-in. drill or rotary pipe; machinery; water and gas separators; dynamite, etc.

Woodworking (Barrel Heading) Machinery.—Jas. T. Rae, Cheraw, S. C.—Catalogues and prices from manufacturers of slack barrel heading machinery.

Wire Ties.—W. T. Rodman, care Washington Hollow Wall Concrete Co., 333 Kenosia Bldg., 11th and G Sts. N. W., Washington, D. C.—Prices on wire ties of 10-gauge wire 6 in. to 18 in. long.

Woodworking Machinery, etc.—Bonbow Mfg. Co., Bridgeport, Ala.—Machinery for package-handle factory.

FINANCIAL NEWS

An Entertaining Volume.

The report of the proceedings of the thirteenth annual convention of the South Carolina Bankers' Association, by Lee G. Holloman, secretary and treasurer, Anderson, S. C., has been published in a handsome cloth-bound volume of about 200 pages. It is excellently printed on good paper, and the illustrations are fine. The convention was held July 11 and 12, 1913, at Lake Toxaway, N. C., and the account of it presented by Mr. Holloman is well worth perusal, being full of interest. Bright Williamson of Darlington, S. C., is president of the association, and C. J. Shannon, Jr., of Camden, S. C., is vice-president.

Two Tons of Bonds by Truck.

The recent sale of \$51,000,000 of 4½ per cent. bonds by the State of New York to Wm. A. Read & Co. and Kuhn, Loch & Co. of New York city was one of the largest single operations in securities ever recorded, and it was particularly gratifying because the issue was about five times oversubscribed. The price obtained for the bonds was 106.077. The magnitude of the transaction is made impressive by the statement published in New York that the purchasers found themselves obliged to hire an automobile truck to deliver \$50,000,000 of the securities (two tons weight), which they had resold to dealers and investors within less than an hour on the day after they were bought from the State. It is further remarked that never was so large a deal concluded within so short a time.

Bank Reports.

National Exchange Bank of Baltimore, Md., reports January 13, 1914, loans and discounts, \$4,084,840; cash and due from reserve agents, \$1,364,555; capital stock, \$1,000,000; surplus and undivided profits, \$729,685; circulation outstanding, \$944,197; deposits, \$4,576,962; United States deposits, \$289,187; United States bonds borrowed, \$90,500; total resources, \$7,730,533; Waldo Newcomer, president; Summerfield Baldwin, vice-president; R. Vinton Lansdale, cashier; Clinton G. Morgan and Joseph W. Leffler, assistant cashiers.

First National Bank, Baltimore, Md., reports January 13, 1914, loans and discounts, \$4,976,836; lawful money reserve in bank, viz., species and legal-tender notes, \$1,121,500; capital stock paid in, \$1,000,000; surplus fund, \$350,000; undivided profits, less expenses and taxes paid, \$87,794; national bank notes outstanding, \$642,500; total deposits, \$8,778,396; total resources, \$10,861,633. H. B. Wilcox, president; Blanchard Randall, vice-president; Wm. S. Hammond, cashier; Samuel W. Tschudi and R. E. Bolling, assistant cashiers.

The First National Bank, Richmond, Va., capital \$2,000,000, surplus \$1,000,000, has issued a statement of its condition at the close of business January 13, presenting the figures on a handsomely printed and illustrated leaflet, one of the pictures being an interior of the bank building and another a bird's-eye view of Richmond, including the home of the institution. The total assets of the First National are \$18,482,230.82, comprising loans, etc., due in 30 to 60 days, \$7,737,370.28; other loans and discounts, \$4,926,715.33, besides items which are promptly available amounting to \$5,818,145.21. The deposits amount to \$12,576,737.17. John B. Purecell is president; John M. Miller, Jr., vice-president, and W. M. Addison, cashier, in addition to six assistant cashiers, one of whom, W. P. Shelton, has prepared a chart of deposit fluctuations of Richmond banks at statement calls which accompanies the statement.

FINANCIAL CORPORATIONS

Ark., Texarkana.—Chartered: H. M. Melver Abstract Co.; capital \$300,000. H. M. Melver, Pres.; J. P. Cook, V.-P.; Maggie Phillips, Secy.-Treas.

Ark., Thornton.—Citizens' Bank of Thornton, capital \$10,000, which succeeds the Bank of Thornton, has begun business. B. E. Halpin, Pres.; W. C. Ribbenack, V.-P.; A. C. McCain, Secy., and O. F. Krug, Cash.

D. C., Washington.—Washington Underwriters of Washington, to act as insurance agents, is organized; authorized capital \$10,000. Inceptors: J. R. Simpson, J. Rob Simpson, Jr., M. B. Simpson, C. W. Simpson, S. R. Middleton.

Fla., Dade City.—First National Bank of Dade City is organized with William Redding Pres.; L. J. Cooper, Waycross, Ga., V.-P.; J. R. Walker, Cash.

Fla., Jacksonville.—Knickerbocker Investment Co. has made application for charter; capital \$25,000. Claude Nolan, Pres.; C. S. Robertson, V.-P.; Geo. S. Carroll, Secy. and Treas.

Ky., Paris.—People's Bldg. & Loan Assn. has filed articles of incorporation; capital \$100,000. Inceptors: F. P. Campbell, D. S. Henry, P. A. Thompson, G. N. Gorey, Silas Bedford, Wm. Bryan and John Northcott.

La., Belcher.—Belcher State Bank is organized with paid-in capital of \$20,000; J. S. Douglas, Pres.

La., Franklin.—Realty, Abstract & Sales Co. is organized by Wilson T. Peterman, Pres.; Thomas M. Milling, V.-P.; L. A. Loustalot, Treas. and Mgr.; R. C. Milling, Secy., and James A. Peterman.

La., New Orleans.—New Orleans Underwriters' Agency inceptd.; began business Jan. 1 at 308 Camp St., New Orleans; capital \$5,000; surplus \$12,500. Directors: Jas. B. Ross, Pres.; J. W. Alexander, V.-P.; Wm. P. Mans, Secy.-Treas.; S. H. Ellis, J. W. Bolton and E. J. McGiviry.

La., Shreveport.—Red River National Bank has made application to organize; capital \$150,000; organizers, John P. Scott, H. M. McGee, W. C. Blanchard, J. H. Jordan, A. M. Wilder and others.

Mo., Golden City.—Golden City National Bank has made application to organize; capital \$25,000; organizers, C. C. Yeder, C. W. Sheppard, J. B. Houdysell, W. R. Crowther and J. B. McNaught. This succeeds the Golden City Bank.

Mo., St. Louis.—Love Mortgage Investment Co. chartered; capital \$5000. Inceptors: Lacy M. and John A. Love and Wilbur B. Jones.

N. C., King.—Chartered: Bank of King, authorized capital \$25,000; paid in, \$5000. Stockholders: V. T. Grabs, S. W. Pulliam, E. P. Newsum and others of King; A. M. Stack and Dr. J. W. Walter Neal of Monroe, and others.

N. C., Smithfield.—Bank of Smithfield has made application to convert into the First National Bank of Smithfield; capital \$50,000.

N. C., Statesville.—A new bank with authorized capital of \$100,000 is being organized by George H. Brown, Dr. Long, Judge Coble and others.

Okla., Fairland.—First National Bank inceptd.; capital \$25,000. Organizers: N. C. Gallemore, J. H. Connolly, Frank Gaines, M. J. Campbell and J. S. Moore. Business is to begin about March 15.

Okla., Oklahoma City.—Chartered: Security Trust Co., capital \$10,000; incorporators, William Mee, S. R. Raymond and William Raymond.

Okla., Beggs.—Farmers' National Bank has made application to organize; capital \$25,000; organizers, W. F. Steigledger, W. G. Reynolds, J. N. Thompson and G. E. Siler. This succeeds the Farmers' State Bank of Beggs.

Okla., Tupelo.—Farmers & Merchants' State Bank has made application to convert into the Farmers' National Bank; capital \$25,000.

S. C., Bamberg.—Chartered: Enterprise Bank, capital \$30,000; H. M. Graham, Pres.; N. A. Hunt, V.-P.; C. E. Black, Cash.

S. C., Cheraw.—Chartered: Enterprise Bank; capital \$30,000; H. M. Graham, Pres.; N. A. Hunt, V.-P.; C. E. Black, Cash.

S. C., Clinton.—Commercial Loan & Trust Co. commissioned; capital \$25,000; petitioners, L. H. Davidson, G. W. Young, E. J. Adair, H. D. Henry and John D. Bell.

S. C., Laurens.—Commissioned: Farmers' Bank of Laurens, capital \$50,000. Petitioners: M. J. Owings, J. C. Owings and R. Fleming Jones.

Tenn., Chattanooga.—People's Building and Loan Association has applied for charter; capital \$100,000; incorporators, John R. Evans, Fred A. Noll, J. H. Brockhouse, Jr., L. C. Orr, Lewis Duncan, Vincent E. Socksteder, W. H. Peck, W. H. Meacham and E. M. Tansey.

Tenn., Maryville.—Blount County National Bank has made application to organize; capital \$50,000. Organizers: D. R. Goddard, J. H. Staley, H. C. Kopecke, J. H. Mitchell and J. H. Webb.

Tex., Jasper.—Citizens' National Bank chartered; capital \$25,000; W. J. B. Adams, Pres.; John H. Seale, Cash.

Tex., Houston.—Security Investment & Development Co. has filed charter; authorized capital \$500,000, with \$12,500 subscribed; incorporators, John H. Kirby, E. J. Hussion, John A. Hulen, C. J. Kirk and J. F. Wolters.

Tex., Sherman.—Chartered: Grayson Building & Savings Co., capital \$50,000; incorporators, J. A. L. Wolfe, H. A. Holliday, J. B. Wilson, H. W. Head, B. B. Wilbanks, S. W. Porter, W. B. Loving, Jerry Wall, T. F. Newell, O. L. Bailey and J. Q. Adamson.

Tex., Sweetwater.—Sweetwater State Bank will begin business Feb. 2.

Tex., Wichita Falls.—National Bank of Commerce of Wichita Falls has made application to organize; capital \$100,000; organizers, J. L. Jackson, J. J. Lory, L. A. Boyd and G. D. Anderson.

Tex., Winfield.—Approved: First National Bank of Winfield; capital \$40,000.

W. Va., Danville.—Diamond National Bank of Danville has made application to organize; capital \$50,000; Sidney White, S. T. Canterbury, J. D. Perry, J. M. Hopkins and C. O. Jarrell.

NEW SECURITIES

Ala., Lanett.—Feb. 9 Lanett School Dist. will vote on \$12,000 5 per cent. 20-year school-building bonds. Address School Commissioners.

Fla., Auburndale.—Election to vote on \$35,000 road bonds is postponed indefinitely; E. S. Anderson, Mayor.

Fla., Bartow.—Well, Roth & Co., Cincinnati, have purchased \$50,000 5 per cent. 20-year school bonds.

Fla., Ocala.—Bids will be received Feb. 19 by Board of Public Instruction for Marion County, J. H. Brinson, Supt., for \$12,000 5 per cent. 20-year bonds of Dunnellon Special

dumps and even center discharging devices—and all were discussed freely by builders, truck salesmen, makers and users. It appeared that speeds are an important factor, but the human element and the economy of discharging were more important than moving speeds of the vehicles. Most dealers were shown to run six-ton trucks from 9 to 11 miles an hour, and five-ton trucks 12 miles an hour. By coal trucks it was shown that as high as 15 cents a ton saving in handling cost had been accomplished by motor trucks.

Wire Plant at Fairfield, Ala.

[Birmingham News.]

Steam in the furnaces of the department and machinery being turned over and some rolling being done—these things mean practically, despite the lack of official verification, that the big plant of the American Steel & Wire Co. at Fairfield is in operation. The Tennessee Coal, Iron & Railroad Co., another subsidiary organization of the United States Steel Corporation, is said to have delivered 20,000 tons of steel billets to the wire plant, and nothing remains for the full operation to start but the alignment of the machinery, which is being given a try-out daily.

"I will not make any statements as to the plant starting up," insisted Superintendent Lutz. "The machinery has to be in the best of shape before everything is going, and that time we will not say is at hand."

Labor is being added to the force at work in the big industry and persons riding around the plant are pleased at the smoke coming from the smokestacks and the noise of the whirling machinery.

At the steel works of the Tennessee Coal, Iron & Railroad Co., according to all indications, there is satisfaction that the steel wire mills are either in operation or will be before Wednesday of this week, considerable labor having been advised to be on hand.

Demand for steel wire goods and nails is such as to warrant operation of plants. The Gulf States Steel Co. will on January 26 start up its open-hearth furnaces in full again, after a shutdown of a month. Before Christmas there was considerable accumulation of steel billets, but these have been used up, and the statement is

made from a semi-authoritative source that the company is behind in barbed wire orders something like 35,000 spools, and steady operation is assured for some time.

Shipments are being made as quickly as the production, and the prospects are there will be a continuation of this condition into summer.

It is announced that out of 3200 men employed in and around the iron and steel industries of the Tennessee Company at Ensley, less than 1500 were laid off, and a large portion of these have been given other employment or have left here. There is a re-employment of labor to be noted around Ensley, and it is to be heard in the Steel City that before the end of the month more than 600 hands will be at work in the new plant of the American Steel & Wire Co.

TO THE HOLDERS OF \$3,000,000

THE MINNEAPOLIS & ST. LOUIS RAILROAD COMPANY

6% GOLD NOTES

DUE FEBRUARY 1, 1914

Holders of the above-mentioned Notes are hereby notified that this Company has decided to pay off at maturity \$500,000 par value thereof, and to offer in exchange for the remaining \$2,500,000 par value thereof, new Notes of like amount, maturing February 1, 1916, with interest at 6% per annum, payable semi-annually, February 1st and August 1st.

The \$2,500,000 new Notes will be secured by the deposit of \$5,500,000 The Minneapolis & St. Louis Railroad Company Refunding and Extension Mortgage 5% Gold Bonds, due Feb. 1, 1962.

The new Notes may be redeemed at any time at par and interest, at the company's option, upon sixty days' previous notice.

A cash payment of \$25 in respect of each \$1,000 Note exchanged will be made to holders accepting the extension.

Holders of the above-mentioned Notes, who desire to avail themselves of the privilege of exchange on the above-mentioned terms, must, on or before **JANUARY 31, 1914**, deposit their Notes (ex February 1, 1914, coupons) against Temporary Receipts, exchangeable for Definite New Notes when ready, such deposit to be made at the office of Messrs. **SPEYER & CO.**, 24 Pine Street, New York City, where the payment of \$25 per \$1,000 Note will be made on February 2, 1914.

Notes not deposited for extension, as above, will be paid at maturity at the office of the **Central Trust Company of New York**.

Copies of the Trust Indenture securing the New Notes may be obtained upon application.

The Minneapolis & St. Louis Railroad Co.
By F. H. DAVIS, Vice-Pres. & Treasurer.
New York, January 13, 1914.

CONDENSED REPORT TO COMPTROLLER

The First National Bank

OF BIRMINGHAM, ALA.

ALABAMA'S FIRST MILLION-DOLLAR BANK

TUESDAY, JANUARY 13, 1914.

RESOURCES	
Loans and Discounts.....	\$9,317,331.22
Overdrafts.....	275.15
U. S. Bonds (Par.).....	1,500,000.00
State of Alabama Bonds...	299,000.00
Other Stocks and Bonds...	671,500.00
Banking House.....	365,500.00
CASH	
In Vault.....	\$1,156,530.88
With Banks..	2,718,936.41
With U. S. Treasurer..	105,950.00

\$ 3,981,417.29

\$16,165,023.66

LIABILITIES	
Capital Stock.....	\$ 1,500,000.00
Surplus and Profits.....	1,667,920.60
Circulation.....	1,350,000.00

DEPOSITS

Individual... \$	9,188,565.23
Bank.....	1,855,191.72
United States.	603,346.11

\$11,647,103.06

\$16,165,023.66

OFFICERS

W. P. G. HARDING, President

J. H. WOODWARD, Vice-President

THOMAS HOPKINS, Cashier

THOMAS BOWRON, Asst. Cashier

J. E. OZBURN, Secretary Savings Department

J. L. CROSS, Auditor

J. H. BARR, Vice-President

F. S. FOSTER, Asst. Cashier

J. K. FLEMING, Asst. Cashier

PARTICULAR ATTENTION GIVEN TO COLLECTIONS
DIRECT CONNECTIONS AT ALL ALABAMA POINTS

The Home Insurance Company

No. 56 Cedar Street, NEW YORK

One Hundred-and-Twenty-First Semi-Annual Statement

JANUARY, 1914

SUMMARY OF ASSETS:

	Par Value.	Market Value.
Cash in Banks and Trust Companies.....	\$1,810,185 35	
United States Bonds.....	\$150,000 00	162,000 00
State and City Bonds.....	6,533,400 00	6,185,640 00
Railroad Bonds.....	8,923,800 00	7,882,300 00
Miscellaneous Bonds.....	1,980,000 00	1,794,600 00
Railroad Stocks.....	10,021,500 00	10,629,270 00
Miscellaneous Stocks.....	1,300,000 00	1,519,000 00
Bank and Trust Co. Stocks.....	159,300 00	407,750 00
Bonds and Mortgages, being first lien on Real Estate		10,800 00
Premiums uncollected, in course of transmission and in hands of Agents.....		2,493,651 46
Accrued interest.....		244,719 00
		\$33,139,915 81

LIABILITIES.

Cash Capital.....	\$6,000,000 00†
Reserve Premium Fund.....	13,447,976 00
Reserve for Losses.....	1,184,259 90
Reserve for Re-Insurance.....	334,660 22
Reserve for Taxes.....	200,000 00
Reserve for Miscellaneous Accounts due and unpaid.....	100,000 00
Reserve as a Conflagration Surplus.....	1,800,000 00†
Surplus over contingencies and all liabilities, including capital.....	10,073,019 69†
	\$33,139,915 81

Surplus as regards policy-holders..... \$17,873,019 69†

DIRECTORS.

Levi P. Morton,	William D. Baldwin,
Elbridge G. Snow,	Lewis L. Clarke,
George H. Hartford,	Clarence H. Kelsey,
Henry F. Noyes,	William Ives Washburn,
Lucien C. Warner,	Elbert H. Gary,
John Claflin,	Thomas B. Kent,
John H. Flagler,	Cornelius N. Bliss, Jr.,
Frederic C. Buswell.	

ELBRIDGE G. SNOW, President.

FREDERIC C. BUSWELL, Vice-President.

CLARENCE A. LUDLUM, Vice-President.

CHARLES L. TYNER, Vice-President and Secretary.

AREUNAH M. BURTIS, Secretary.

HENRY J. FERRIS, Asst. Secretary.

HOWARD P. MOORE, Asst. Secretary.

VINCENT P. WYATT, Asst. Secretary.

New York, January 13th, 1914.

Classified Opportunities

MEN WANTED

WANTED—By large real estate auction company, a good man for road work securing contracts for land sales; fine opportunity right man; salary or commission; state all. Address Box 402, Jackson, Tenn.

WANTED—Applications, with references, for secretary Chamber of Commerce. Write Jno. T. Roddey, President, Rock Hill, S. C.

THE GASTONIA CHAMBER OF COMMERCE desires to employ a competent secretary. For particulars address A. C. Jones, Secretary of Board of Directors, Gastonia, North Carolina.

LARGE JOBBER of twines and cordage in Eastern city desires services of AI traveling salesman and office manager; entire charge of its Southern business; unusual opportunity for young man of character, energy and thorough knowledge of trade. Address No. 1446, care Manufacturers Record, Balto., Md.

A PRACTICAL GOLD-MINING ENGINEER that can command on his report \$25,000 cash, wanted to take hold and develop and operate a splendid gold-mining property near Dahlonega, Ga. Can get particulars by writing to me. No letter not accompanied with references of experience, integrity and financial credit, based on favorable reports, will be answered. S. A. Jones, Waynesville, N. C.

WANTED—Man to look after picker-room and nine sets of wooden cards making cotton-waste yarns; pay \$2 per day. Also man to look after 12 miles of 300 spindles each, together with winding, twisting and reeling machinery; pay \$3 per day; or would pay man \$4 per day for both rooms; Davis & Furber machinery. Demopolis Cotton Mills, Demopolis, Ala.

PAINT MANUFACTURER of long experience and established reputation requires high-class salesman of wide acquaintance and good standing among coal companies and other paint users in Southwestern Virginia and Southern West Virginia. Experience in paint business preferable but not essential. Address No. 1441, care Manufacturers Record, Balto., Md.

AGENTS WANTED among supply dealers and salesmen for an exceptional house-lighting machine, suitable for small homes as well as large; simple, durable, economical; satisfaction guaranteed to customers; has excellent selling points; a live proposition. Write for terms. The Alexander N. Milburn Co., Baltimore, Md.

AGENTS acquainted with railroads and County Commissioners to carry short line high-grade metallic paints. Address The Atlantic Paint Co., 185 Madison Ave., New York City.

MANAGER—A capable manager is wanted by a large, well-equipped chair factory in the South; excellent opportunity for capable man. Address No. 1434, care Manufacturers Record, Balto., Md.

WANTED—A bright, ambitious, well-educated man with natural tendency for salesmanship. Splendid opening with real estate company in a progressive Southern city. Address Box 595, Wilmington, N. C.

WANTED—Experienced man who understands the manufacture of hosiery to take charge of a small knitting mill. Address Jacob Spiro, Knoxville, Tenn.

WANTED—Dealers and agents in the South to handle the Blystone concrete mixer. A mixer which meets the growing demand for a thorough and dependable machine that can be bought at a price which the small contractor can afford to pay. A great seller backed up by wide advertising. Address Blystone Machinery Company, Box 89, Cambridge Springs, Pa.

AGENCIES WANTED

WANTED—Sales agency for all lines pertaining to builders' specialties; East Tennessee as territory; can furnish satisfactory references to interested concern; modern warehouse facilities. Address Daniel Briscoe, Jr., 325-327 State St., Knoxville, Tenn.

HAVE YOU A CINCINNATI REPRESENTATIVE? If not, you should have. I want a good line for that territory. Write me about yours and we may be able to help each other. Merchandise, 1819 First National Bank Bldg., Cincinnati, Ohio.

MANUFACTURER'S AGENTS acquainted with builders and architects wanted by live, up-to-date iron works for the South, both structural and ornamental; commission basis. Roanoke Iron Works, Inc., Roanoke, Va.

Mfrs. of hardware and household specialties wanting representation in N. Y. City and vicinity. Have ample room and office. Connections, Atlanta, Jacksonville. Small salary and com. L. O. Dana, 107 Chambers St., N. Y. City.

STATE AGENCY WANTED for floor tiling, lime, wall plastering, Portland cement, roofing paper, composition shingles and mortar. We contemplate handling building supplies in connection with the manufacture and sale of common brick, face brick and fire brick. Address No. 1415, care Manufacturers Record, Balto., Md.

RATES AND CONDITIONS

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 25 lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, post office or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 18c per line. 300 lines 16c per line; 500 lines or more, 15c per line

SITUATIONS WANTED

FOR YEARS secretary and treasurer group of selling and operating companies, accountant, systematizer, credits, collections, finances; location immaterial; highest references; strict habits; bond any sum; age 39; married. Address No. 1436, care Manufacturers Record, Balto., Md.

MECHANICAL-ELECTRICAL ENGINEER, efficient draughtsman, desires to become engineer in the South. State offer. Address Wm. W. Williams, 38 Schermerhorn Street, Brooklyn, N. Y.

YOUNG MAN wishes invest about \$3000, with services; now holding responsible position in South; college, business and commercial law education; thorough business training, and an accountant. Address No. 1432, care Manufacturers Record, Balto., Md.

WANTED—By competent electric construction estimator and superintendent, with 16 years' experience in all classes electric and mechanical-electrical work, steady position with engineering and contracting firm. Address P. B. Carpenter, care of R. W. Knight & Co., Birmingham, Ala.

AMERICAN, now employed, 30 years old, married, chemical engineer, graduate of Southern technical school, recently returned from three years' residence in South America, wishes to connect himself with export department of manufacturing concern or commission house; has had experience with house exporting machinery and has called on customers in this country and in South America; speaks and writes Spanish. Rio Piedras, 719 Empire Bldg., Atlanta, Ga.

MY SERVICES FOR SALE—Experienced commercial secretary, office manager, advertising, publicity and newspaper man, desires permanent position; now and for past 3 years associated with Col. Henry Tull, President Texas Industrial Congress, as Sec'y and office manager; unqualified recommendations upon request. W. C. Barrickman, Sec'y Texas Industrial Congress, Dallas, Texas.

ENGINEER-DRAFTSMAN, experience steam, electrical, refrigeration, general construction in steel and concrete; moderate salary. Address No. 1438, care Manufacturers Record, Balto., Md.

WANTED—Congenial employment by energetic married man of college education and of more than twenty years' successful experience at the head of an enterprise widely and favorably known in Alabama and the South; auditorship, superintendency, or connection with some first-class publishing house preferred. Would serve first 6 months for \$150 a month net. First-class references as to energy, sobriety and character. Address Superintendent, 95 Houston St., Montgomery, Ala.

A NO. 1 MECHANIC, now employed as master mechanic, wishes to change; prefer South; general all-round mechanic in construction, sawmilling, mining; now located in Fla. What have you to offer? I know how to handle men. No. 1440, care Manufacturers Record, Balto., Md.

YOUNG MAN, single, Government employe, desires connection with reputable house with view of representation, preferably Washington and nearby cities; commission or salary; some experience; references furnished. Address D. E. Harris, Plymouth Apts., Washington, D. C.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical, Electrical and Chemical Engineering and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), Chemical Engineer (Ch.E.), and Bachelor of Science (B.S.). Also special courses. Splendidly equipped new engineering laboratories. Send for catalogue to Registrar.

CAPITAL WANTED

A GOING CONCERN, owning its plant and doing a manufacturing, general machine shop, foundry and contract business, best location in South Atlantic States, fine prospects, plenty of work not easily affected by outside conditions, wants \$20,000 active working capital; terms to be arranged. Don't write unless genuinely interested and have the money. Address No. 1289, care Manufacturers Record.

RAILROAD ICING STATION in Florida, cantaloupe section, needs \$5000 to increase ice and storage capacity; plant cost \$15,000; want partner or first mortgage loan at 10 per cent. Crystal Ice Co., High Springs, Fla.

A GRAVEL PIT containing the best quality of stone, covering a large area, situated on railroad, and having a good water supply, needs \$30,000 capital to open and make it a most lucrative proposition. I have determined ready markets and have contract with railroad. I can show great returns to anyone who stands ready to invest the above amount. Address No. 1445, care Manufacturers Record, Balto., Md.

A GOING drug manufacturing concern wants a good, honest, energetic man who can put \$2000 or \$3000 into the business and either go on the road or handle men on the road. J. W. Cass, Johnson City, Tennessee.

BUSINESS OPPORTUNITIES

REAL ESTATE MEN can turn over some quick sales by listing the low-priced, small-acreage farms we have opened on our line. Address J. R. McConnell, R. & C. R. R., Carthage, N. C.

FOR SALE OR TRADE—A good proposition for practical mechanic. One-half interest in Oklahoma Bridge & Culvert Co. and Sheet Metal Works, located at Guthrie, Okla.

A FINE BUSINESS OPPORTUNITY for a party who desires to invest in a telephone exchange. Address H. C. McPherson, Mgr. Oneonta Telephone Exchange, Oneonta, Ala.

MICA MINE—Half interest for sale, and mineral rights on 600 acres. Also, 700 acres woodland in fee, \$4.50 per acre. Do not answer unless you mean business. Box 928, Asheville, N. C.

GENTLEMAN of business experience can secure excellent position as treasurer of large and thoroughly established company manufacturing high-grade table and toilet wares. Investment \$5000 or more. This is a big opportunity for the right man. Address No. 1447, care Manufacturers Record, Balto., Md.

A CLIENT of ours has a site suitable for a small warehouse or manufacturing business. He will erect a building for a good tenant. The location is a convenient shipping point in this city. The Central Realty Co., Inc., 1006 Hull Street, Richmond, Va.

PLANING MILL FOR SALE in Southern town of 10,000 inhabitants; town and country developed rapidly; good railroad center; excellent opportunity to add general line of building supplies for local and jobbing business. Address No. 1443, care Manufacturers Record, Balto., Md.

ASSIGNEE'S NOTICE OF SALE—Notice is hereby given that the undersigned, as assignee of the Lilbourn Screen & Power Company, will offer for sale the assigned property, as follows:

One Screen Door Factory, consisting of ground, warehouse, factory, and all necessary machinery and power to manufacture screen doors.

One Electric Light Plant, consisting of ground, power-house, office, steam power, poles and wiring, a twenty-year franchise, with all supplies on hand. Both plants to be sold together. Three hundred dozen property on hand on day of sale. All of the above property is situated in the City of Lilbourn, County of New Madrid and State of Missouri. Sealed bids will be received on or before 12 o'clock noon of the tenth day of February, 1914. I will reserve right to reject any and all bids. Terms of sale, cash. L. Leroy Thompson, Assignee of the Lilbourn Screen & Power Company.

HALF INTEREST in foreign patents on sidewalk and concrete road machinery to parties paying cost of patents, Canada excepted. Full particulars. A. J. P., Box 776, Meridian, Miss.

A SPLENDID BUSINESS OPPORTUNITY. Interest in plant, output of which is about \$800,000 per annum, manufacturing finished hardwood material. One of the oldest plants of its kind in Atlanta. No indebtedness. Flourishing condition. Want partner with capital of \$50,000, who may take position of vice-president or secretary and treasurer, who will handle buying and credits. Vacancy made by present partner retiring from active business. If strictly good business proposition desired, address W. H. Leahy, Chamber of Commerce, Atlanta, Ga.

ALL manufacturers of and dealers in individual drinking cups, cabinets and vendors, and also drinking fountains and drinking fountains with coolers attached for use in schools and public places, will please send descriptive circulars and price-lists promptly to State Board of Health, Richmond, Va.

GEORGIA GOLD—This is the opportunity in a lifetime for a man with some money to become a millionaire. If you are interested, come and investigate the proposition. If it does not come up to your expectation, taking this ad. for a basis, we will pay all expenses. Georgia Gold Mining Company, Tallapoosa, Ga.

GO SOUTH. An unusual chance. Well-established ice-cream and confectionery business. Population 20,000, and still growing. Only ice-cream factory in the city. A chance of a lifetime. Address P. O. Box 705, New Bern, N. C.

MODELS

MODELS MADE FOR INVENTORS—General machine work. Designing and perfecting. Developing automatic devices and machinery. In a position to do all kinds of light tool and machine work. Prices reasonable. Estimates cheerfully given. Ideal Machine Works, 64 Ann Street, New York City.

PLANING MILL PLANS W-NTED

WE WILL PAY \$500, for each acceptable suggestion regarding building arrangement of machines, economy of operation, safety, etc., for our new planing mill. Also buy accepted plans and specifications. Send for list of twenty machines. Cave Spring Planing Mill, Cave Springs, Ga.

R. R. TERMINAL AND FACTORY SITES

DESIRABLE MANUFACTURING SITE NEAR ATLANTA FOR SALE—Large acreage, on Southern Ry. Also large tract in Birmingham suitable for railroad terminal or manufacturing. Coffield Investment Co., Atlanta, Ga.

FACTORY SITES

FOR SALE—Two large factory buildings and six tenant-houses; side-door delivery to railroad; exceptional railroad facilities; on Buckhorn Electric Power Line; water works; in center of splendid farming district; situation, Jonesboro, Lee county, N. C.; will sell or rent; terms favorable. Address R. E. Carrington, Sanford, N. C.

FOR SALE—As a whole or in part, 42 acres smooth and level land, lying between and adjoining two railroads in the suburbs of Hagerstown, Md. Splendid facilities and special inducements for manufacturing purposes. Address Bower & Bower, First National Bank Bldg., Hagerstown, Md.

INDUSTRIES WANTED

MISCELLANEOUS

INDUSTRIES WANTED—We offer cheap labor, unlimited electric power, plenty raw material, and best climate in the world. For full particulars write Roland G. Spearman, Sec'y., Talladega, Ala.

HENRIETTA, TEX., offers unlimited supply natural gas 4c. to manufacturers; fire brick, tile shales; water; low taxes; healthful; 3 railroads; unusual opportunity legitimate enterprises. Address Booster Club.

BLUEFIELD, WEST VIRGINIA, the gateway to the vast Pocahontas coal fields, and the distributing point for half a million contented laborers, needs an overall factory, needs a mine implement factory, and needs a brick plant. Address C. T. Boykin, Secretary Bluefield Chamber of Commerce.

ARE YOU seeking a factory site or a location for a wholesale or distributing house of any kind to reach the Southern and Southwestern markets? If so, Memphis is the place for you, because it is the geographical center and the gateway of the sections you wish to cover; because "Memphis makes the Rates," having 17 railroads and the Mississippi River, and because she has cheap and abundant raw materials, excellent labor conditions, and is unsurpassed as a residence city. Above all, she has 200,000 wide-awake citizens ready to welcome you and cooperate with you. Address John M. Tuther, Sec'y Business Men's Club, Memphis, Tenn.

INDUSTRIAL PLANTS FOR SALE

ICE PLANT

FOR SALE—Five-ton ice plant, all installed ready for operation, in good territory, centrally located in Bradford county, Florida. Write H. J. Smith, Tarpon Springs, Fla.

FOUNDRY

FOR SALE—The best-equipped foundry between Richmond, Va., and Atlanta, Ga. The owner, after 29 years in same business, wishes to retire. For particulars address No. 1405, care Manufacturers Record, Balto., Md.